

***Epistomius*, a new genus of African forest litter  
Trachyphloeini, with descriptions of seven new species  
(Coleoptera: Curculionidae: Entiminae)**

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**Abstract.** A new genus of Trachyphloeini, *Epistomius* gen. nov. (Coleoptera: Curculionidae: Entiminae) living in forest litter in the eastern part of South Africa is described, illustrated and its position in the subfamily Entiminae is discussed. Seven new species are described: *E. bulirschi* sp. nov. (KwaZulu-Natal), *E. colonnellii* sp. nov. (Eastern Cape), *E. janaki* sp. nov. (KwaZulu-Natal), *E. natalensis* sp. nov. (KwaZulu-Natal), *E. ngomiensis* sp. nov. (KwaZulu-Natal), *E. niger* sp. nov. (KwaZulu-Natal), and *E. wanati* sp. nov. (Mpumalanga), and included in this new genus. All species are keyed and illustrated.

**Key words.** Coleoptera, Curculionidae, Entiminae, Trachyphloeini, taxonomy, new genus, new species, South Africa

### Introduction

South Africa is well known as a country with an incredibly high gymnosperm plant species diversity and is treated as a separate phytobiogeographic region, known as the Capensis Region (HENDRYCH 1984). It is thus highly probable that a high species richness of phytophagous insects, such as weevils, also awaits discovery. The revision of *Gymnetron* Schoenherr, 1825 with descriptions of 54 new species (CALDARA 2003), *Sibinia* Germar, 1817 with descriptions of 41 new species (CALDARA 1989a), or *Tychius* Germar, 1817 with descriptions of 27 new species (CALDARA 1989b) are recent examples of the huge undiscovered insect diversity in South Africa. This high species richness of the floricolous genera is in contrast to the generic richness of the terricolous weevil fauna in that region. The terricolous weevils in this region have great generic-level diversity known from the beginning of 20<sup>th</sup> century, when for

example, Marshall and Hustache described 31 new genera containing mainly newly described species in the tribe Embrithini Marshall, 1942 (ALONSO-ZARAZAGA & LYAL 1999, BOROVEC & OBERPRIELER 2013). On the other hand, research of the terricolous weevil fauna in this region is still only at the beginning and the species richness of the fauna should be also very high, as we can conclude from the number of undescribed species recently seen by us.

As a first part of study of Trachyploeini and Embrithini found in forest litter from the eastern part of South Africa we resolved the taxonomic position of Trachyploeini species living in South Africa described under *Trachyploeus* and any other Trachyploeini genus known from the Palaearctic or Oriental Regions (BOROVEC & SKUHROVEC 2017). The second part of our study of Entiminae associated with forest litter from eastern part of South Africa is devoted to the definition of species around the species *Lalagetes subfasciatus* Boheman, 1842 (type species of the genus *Lalagetes* Schoenherr, 1842) and their differentiation from the genus *Phylomerinthus* Schoenherr, 1842 which accommodates the remaining part of species previously placed in *Lalagetes*, not congeneric with its type species *L. subfasciatus* (BOROVEC & SKUHROVEC in press). In the third part, we recently describe the well defined and monophyletic genus *Epistomius* gen. nov. with seven new species. In the fourth part, we will revise the genus *Pentatrachyploeus* Voss, 1974, where we have recently found 22 new species. In the fifth part we plan to finish the study of this group by description of two new monotypic genera, and to give a complete overview with analysis of this complex group.

#### **Taxonomic position of *Epistomius* gen. nov.**

When sorting the abundant material recently collected in South Africa we have to solve the fundamental problem of assigning species to genera, where more than 90% of the species in our study are new to science. All these species should be described, but the majority of the already described species have been assigned to known Palaearctic genera not otherwise occurring in the Afrotropical Region (BOROVEC & SKUHROVEC 2017). Some morphological characters normally used in this group for adults for generic assignment could not be used in this region due to their high variability within species. For example, the structure of the pronotum or elytra, or antennal scrobes in dorsal view creating an almost complete spectrum from dorsally invisible to hardly visible, slightly visible to creating slender furrows, up to a pit-shaped form. In our opinion, one of the most valuable overviews with a detailed evaluation of the morphological characters of Entiminae (which we completely accept and use) was carried out by OBERPRIELER (1995), who, after examining many morphological characters, used the four most valuable for the grouping of the Myrorhinini; (1) the state of tarsal claws (free or connate), (2) the state and structure of metatibial corbels (open or closed), (3) presence/absence of ocular lobes, and (4) the state of a transverse groove dorsally separating the rostrum from the head. The state of tarsal claws (1) is a morphological character used very often at the generic level in the Palaearctic Region (for example BOROVEC 2009). In view of the currently used terminology (OBERPRIELER et al. 2014) metatibial corbels (2) mean metatibiae with or without corbels (bevels), and in the literature it is one of the main morphological character defining the tribes in Entiminae, first used by LACORDAIRE (1863). This approach to tribal classification will have to be reassessed, because for example in Oosomini Lacordaire,

1863 we can recognize genera with all three positions of corbels – true, false, or missing, as redefined in OBERPRIELER et al. (2014). So, for generic definition this character is largely unuseable. The presence of ocular lobes (3) is defined as one of the most significant morphological characters for example in the tribe Tanyrhynchini, and based on their absence in some genera of Embrithini, Oosomini and Trachyphloeini, these could be separated from very small species of, for example, the tanyrhynchine genus *Eremnus* Schoenherr, 1826. The transverse groove separating rostrum and head (4) has two different states – either very narrow, well edged, mostly V-shaped sulcus, or transverse groove, mostly shallow and moderately broad furrow with ill-defined borders. The correct evaluation of this character is possible only after removal of dense scales covering head and rostrum by scraping them off with very thin pin and small brush. The appressed scales completely hide the details of integumental structure, and the rostrum seems to be without a transverse sulcus or groove, although it may often have a very different structure which is however hidden under the scales. The majority of Embrithini genera have a very slender, V-shaped sulcus, but this character state in Trachyphloeini was previously unknown in the literature focusing not only on South Africa. After a detailed examination of the type species of *Pentatrachyphloeus*, *P. patruelis* Voss, 1974, this character state was confirmed also in Trachyphloeini, and later its presence was also confirmed in all other, undescribed species of *Pentatrachyphloeus*. To the list of four most useful morphological characters according to OBERPRIELER (1995), it is possible to add several others, mainly ventral and anatomical characters: the state of abdominal ventrites – not only the relative length of ventrites, but also the state of different structures on sutures, form of vestiture, and of course the state of different parts in male and female terminalia. As for the male genitalia, the absence or presence of parameres and/or flagellate genital armature seems to be one of the most significant characters useful for species grouping. Regarding the female genitalia, the shape of sternite VIII is as significant as in the Palaearctic Trachyphloeini (BOROVEC 2009), and the base provides several useful differential features, i.e. form of apodeme termination, form of basal margin, apical setae and also the sclerotisation of plate.

According to the latest revisions of Trachyphloeini in the Palaearctic and Oriental Regions (BOROVEC 2009, 2014) and the diagnosis of the tribe, one can present three main claims for this group in South Africa:

1. A group of more than ten undescribed genera and more than hundred undescribed species from South Africa completely corresponding with the states of morphological characters defined by BOROVEC (2009), could be putative South African Trachyphloeini, without a clear relationship to Embrithini. South African Trachyphloeini evolved from them mainly lacking metatibial corbels (LACORDAIRE 1863, MARSHALL 1942, BOROVEC & OBERPRIELER 2013). The relationship between these two tribes should be one of the main topics of further study of South African Trachyphloeini, especially based on molecular analyses, because, as it was stated above, this character itself (corbels) has several different positions also within the tribes and it can hardly be used as the only distinguishing character. Until the results of precise molecular studies of the tribe Trachyphloeini are available, we will follow a conservative separation of Embrithini and Trachyphloeini for South African terricolous entomines. All genera newly described

by us within the tribe Trachyploeini will be for accuracy also compared with similar terricolous Embrithini genera.

2. The true *Trachyploeous* or any other Palaearctic or Oriental Trachyploeini genus is not present in South Africa (BOROVEC & SKUHROVEC 2017). South African Trachyploeini fauna represents a group of several genera absolutely different from all known genera of this tribe from other regions.
3. Despite detailed search for Trachyploeini in the material from equatorial Africa (mainly in several tens of thousands of terricolous Entiminae specimens deposited in the African Museum in Tervuren and sifted by N. Leleup), not a single representative of Trachyploeini from this region was discovered. Due to this unsuccessful detailed search, it is possible to postulate that South African Trachyploeini represent an absolutely separate entity. Trachyploeini could also have a disjunct area. This claim could be confirmed only by a huge molecular study, which may reveal or disprove a relationship with the Mediterranean Trachyploeini, and eventually confirm an adaptive convergence to live in very similar habitat conditions.

### Material and methods

Body length of all specimens was measured in dorsal view from the anterior border of the eyes to the apex of the elytra, excluding the rostrum. Width/length ratio of the rostrum was measured as the maximum width at base versus the maximum length to the base of the mandibles. Width/length ratios of pronotum, elytra, antennal segments and tarsomeres were taken at the maximum width and length of the respective parts in dorsal view. Dissected male and female genitalia were studied in glycerine. Female genitalia were afterwards embedded in Solakryl BMX (Medika, Prague); male genitalia were mounted dry on the same card as the respective specimen. The photos of adults were taken with Canon EOS 550D cameras with an MP-E 65 mm macro lens and combined using CombineZM and GIMP2 softwares. Details of adults and genitalia were taken and corrected with a HIROX RH-2000 digital microscope. The terminology of the rostrum and genitalia follows OBERPRIELER et al. (2014). The terminology of antennae is in accordance with curculionid literature with the numbering of the antennomeres as follows: scape (I), funicle segments (II–VIII), club (IX–XI).

The specimens have been deposited in the following museums and private collections:

ECRI	Enzo Colonnelli collection, Rome, Italy;
GOVI	Giuseppe Osella collection, Verona, Italy;
JJRC	Jiří Janák collection, Rtyň nad Bílinou, Czech Republic;
JSPC	Jiří Skuhrovec collection, Prague, Czech Republic;
MNHW	Museum of Natural History, Wrocław University, Poland (Marek Wanat);
NMPC	Národní Muzeum, Prague, Czech Republic (Jiří Hájek);
RBSC	Roman Borovec collection, Sloupno, Czech Republic;
SANC	National Collection of Insects, Pretoria, South Africa (Riaan Stals);
SMNS	Staatliches Museum Für Naturkunde, Stuttgart, Germany (Wolfgang Schawaller);
TMSA	Ditsong National Museum of Natural History (formerly Transvaal Museum), Pretoria, South Africa (Ruth Müller).

## Taxonomy

### *Epistomius* gen. nov.

(Figs 1A–C, 2A–I, 3A–G, 5A–G, 6A–G, 7A–G, 8A–G, 9A–G, 10A–G, 11A–G)

**Type species.** *Epistomius colonnellii* sp. nov., here designated.

**Diagnosis.** Small Trachyphloeini, less than 2.6 mm in body length, dorsum sparsely covered with appressed scales and glabrous ventrally; rostrum different in both sexes, not separated from head by any sulcus; frons glabrous; epistome short but wide, prominent anteriorly and laterally creating sharp teeth directed dorsally; antennae and tibiae long and slender; metatibiae with apical surface glabrous, without corbels; claws connected at base; abdominal ventrites glabrous; tegmen without parameres; sternite VIII in females with triangular plate, short and robust apodeme terminating inside plate and reaching apex of plate, tip of plate with distinct Y-shaped process, prominent anteriorly.

**Description.** Length 1.6–2.6 mm. Body dark brownish, antennae, extreme apical part of tibiae and tarsi paler, reddish brown, tarsi sometimes paler than antennae. Elytra sparsely covered with appressed irregularly shaped scales - subcircular, subsquared, subtriangular, or awned apically, not covering integument, with moderately wide space between scales. Pronotum, and head with rostrum with dense subrounded scales, with fine fan-shaped striae, creating short, fine and dense fringes on almost half of circumference; scales leaving only short spaces between them. Gena and subgena densely squamose. Scape, femora and tibiae squamose; funicle and tarsi glabrous; club finely moderately densely setose with appressed and also short semiappressed setae. Scale-like setae on elytra long and conspicuous, distinctly longer on posterior declivity than on anterior disc, lance-shaped or subspatulate, creating one regular, moderately dense row on each interval. Setae on pronotum and head with rostrum slightly shorter than setae on elytral disc, on interocular space twice as long as the others. Scape, femora and tibiae with only very short and inconspicuous semiappressed setae, not prominent from outline. Colour pattern of body light brownish to greyish; raised setae paler.

**Head** (Fig. 1A). Rostrum in four species more slender in males than in females (Figs 5B–C, 6B–C, 9B–C, 10A–G), in males 1.1–1.2× as wide as long, at base as wide as at apex to 1.1× wider at apex than at base, with distinctly and regularly concave sides, in place of anterior border of antennal scrobes abruptly, angle-shapedly tapered anteriorly; in females 1.2–1.3× as wide as long, at base as wide as at apex to 1.1× wider at base than at apex, in basal half weakly tapered anteriorly with faintly concave sides, in anterior half regularly rounded around antennal scrobes; in two species equal in both sexes, formed as females rostrum of previous species. Rostrum in lateral view (Figs 5D, 6D, 7D, 8D, 9D, 10D, 11D) weakly regularly convex, not separated from head. Epifrons widest at base, here equally wide as space between anterior margins of eyes, tapered anteriorly with distinctly concave sides, flat, with slender longitudinal median stria along whole length. Epifrons when cleared of scales shiny, not separated from head by any stria or furrow, shallowly deepened, with longitudinal median stria and lateral longitudinal narrow keels, differently shaped in species. Frons glabrous and deepened, sometimes finely longitudinally striate, very short, creating narrow stripe along posterior border of epistome, without setae. Epistome distinctly developed, short but wide, squamose,

shiny, posteriorly distinctly carinate and elevated, carina regularly arched, anteriorly declined to mandibles, bigger in males than in females, creating in lateral view sharp teeth directed dorsally, longer in males; in males epistome distinctly wider, in females equally wide as epifrons at midlength, in two species equal in males and females, similar to female epistome of previous species. Antennal scrobes (Figs 5A, 6A, 7A, 8A, 9A, 10A, 11A) in dorsal view clearly visible on anterior half of rostrum, open, pit-shaped; in lateral view short, reaching about half distance from antennal insertion to eyes, glabrous, weakly curved and moderately enlarged posteriad, with dorsal border directed to dorsal border and ventral border directed to ventral border of eyes. Head wide and convex; when cleared of scales shiny, sometimes with fovea and fine, narrow, longitudinal striae, mostly radiate. Eyes moderately large and convex, dorsally weakly prominent from outline of head; laterally subcircular, placed in dorsal third of head. Head including eyes in males 1.1–1.2× as wide and in females 1.2–1.3× as wide as rostrum at apex. Mandibles small, asquamose, trisetose. Submentum with pair of long, very fine setae. Gena densely squamose, subgena squamose in basal and lateral part, middle part glabrous.

*Antennae* (Figs 5A, 6A, 7A, 8A, 9A, 10A, 11A) long and slender. Scape long and slender, 4.9–6.1× as long as wide, 1.5–1.6× as long as funicle, faintly curved at midlength, weakly gradually enlarged in apical third, weakly slenderer than club or at most equally wide. Funicle 7-segmented, with segment I enlarged, long, slender and conical; segment II conical, distinctly shorter and narrower than segment I; segments III–VII at most 1.5× as wide as long; segments III–V weakly shorter than segments VI or VII. Segment I in club the longest one.

*Pronotum* (Figs 5A, 6A, 7A, 8A, 9A, 10A, 11A) in males weakly slenderer than in females, in males 1.4–1.5×, in females 1.4–1.6× as wide as long, regularly rounded, widest at midlength or just behind, more tapered anteriorly than posteriad, regularly convex at disc without any furrow, stria or depressions. When cleared of scales shiny, sparsely irregularly and coarsely punctured, behind anterior margin bordered by transverse dense row of fine punctures. Pronotum laterally almost flat, behind anterior border lowered. Base straight. Anterior border in lateral view perpendicular to longitudinal axis, without ocular lobes or setae. Procoxal cavities contiguous, round, in middle of prosternum; procoxae subglobular. Scutellum not visible.

*Elytra* (Figs 5A, 6A, 7A, 8A, 9A, 10A, 11A) oval, widest at midlength with regularly rounded sides and broadly rounded at apex, in males 1.1–1.3×, in females 1.2–1.3× as long as wide, in lateral view strongly convex, posterior declivity overhanging apex. Base straight, slightly wider than base of pronotum, elytra in short distance behind base distinctly constricted; posthumeral calli weakly developed, visible in dorso-lateral view. Elytra 10-striate, striae slender, deeply sparsely punctured, intervals when cleared of scales shiny, almost flat, equally wide and elevated; interval 1 behind base somewhat tapered anteriorly. Mesocoxae semiglobular, narrowly separate, mesosternal process about as wide as quarter of diameter of mesocoxa. Metacoxae shortly transverse.

*Legs* (Figs 5A, 6A, 7A, 8A, 9A, 10A, 11A). Femora unarmed, medially inflated, flattened. Tibiae long and slender; protibiae (Figs 5E, 6E, 7E, 8E, 9E, 10E, 11A) 5.5–6.4× as long as wide at midlength, at apex obliquely subtruncate, armed with 5–6 sparse, fine and slender yellowish, almost translucent spines and one conspicuous long and slender, almost straight spine directed inwards; lateral edge weakly curved inwards with short and shallow indentation

just at apex; mesal edge distinctly enlarged inwards; meso- and metatibiae laterally fringed by dense fringe of fine, long, yellowish, bristle-shaped setae and one inward curved mucro, mucro longer in mesotibiae than in metatibiae and longer in females than in males. Apical surface of meso- and metatibiae glabrous, shiny; metatibiae without corbels. Tarsi long and slender, tarsomere I shorter than tarsomeres II and III together, tarsomere II transverse, tarsomere III distinctly wider than tarsomere II and bilobed, onychium long and slender, distinctly enlarged apicad. Claws fused in short basal part, then divergent.

*Abdominal ventrites* (Fig. 1B) in males equally wide and long to  $1.04\times$  wider than long, in females  $1.06\text{--}1.13\times$  as long as wide; ventrite 1 in middle slightly shorter than ventrites 2–4 together, behind metacoxa equally long as ventrite 2; ventrite 2 in middle slightly longer than ventrite 3 or 4; ventrite 5 in males shorter, subtrapezoidal, in females longer, subtriangular. Suture between ventrites 1 and 2 straight, fine and narrow, between 2–5 weakly arched, wide and deep. All ventrites asquamose, shiny, unpunctured, with several inconspicuous, short and fine, appressed piliform setae. Metaventral process obtuse, slightly wider than transverse diameter of metacoxa.

*Sexual dimorphism.* Males and females are easily distinguished by many external characters; males have rostrum more slender with distinctly wider and more conspicuous epistome (Figs 5B, 6B, 7B, 8B, 9B, 10B, 11B), rostrum at apex abruptly angularly tapered anteriad, while females have rostrum at apex regularly rounded around antennal scrobes (Figs 5C, 6C, 7C, 8C, 9C, 10C, 11C); pronotum slenderer in males; elytra slenderer in females; females have mucro in meso- and metatibiae longer than males; females have longer abdominal ventrites and longer, subtriangular ventrite segment 5.

*Variability* (Figs 2A–I). In three newly described species conspicuous variability in shape of raised elytral setae was registered. Similar variability in shape of setae is known only in Palearctic Trachyphloeini, where parthenogenetic species with a large region of occurrence

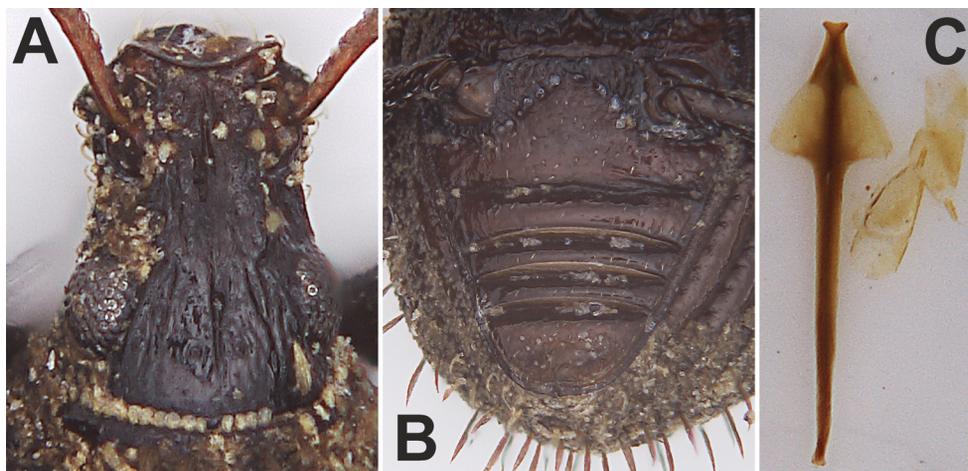


Fig. 1. *Epistomius colonnellii* sp. nov. A – rostrum without scales, dorsal view, B – abdominal ventrites; C – female sternite 8 and gonocoxites, dorsal view.

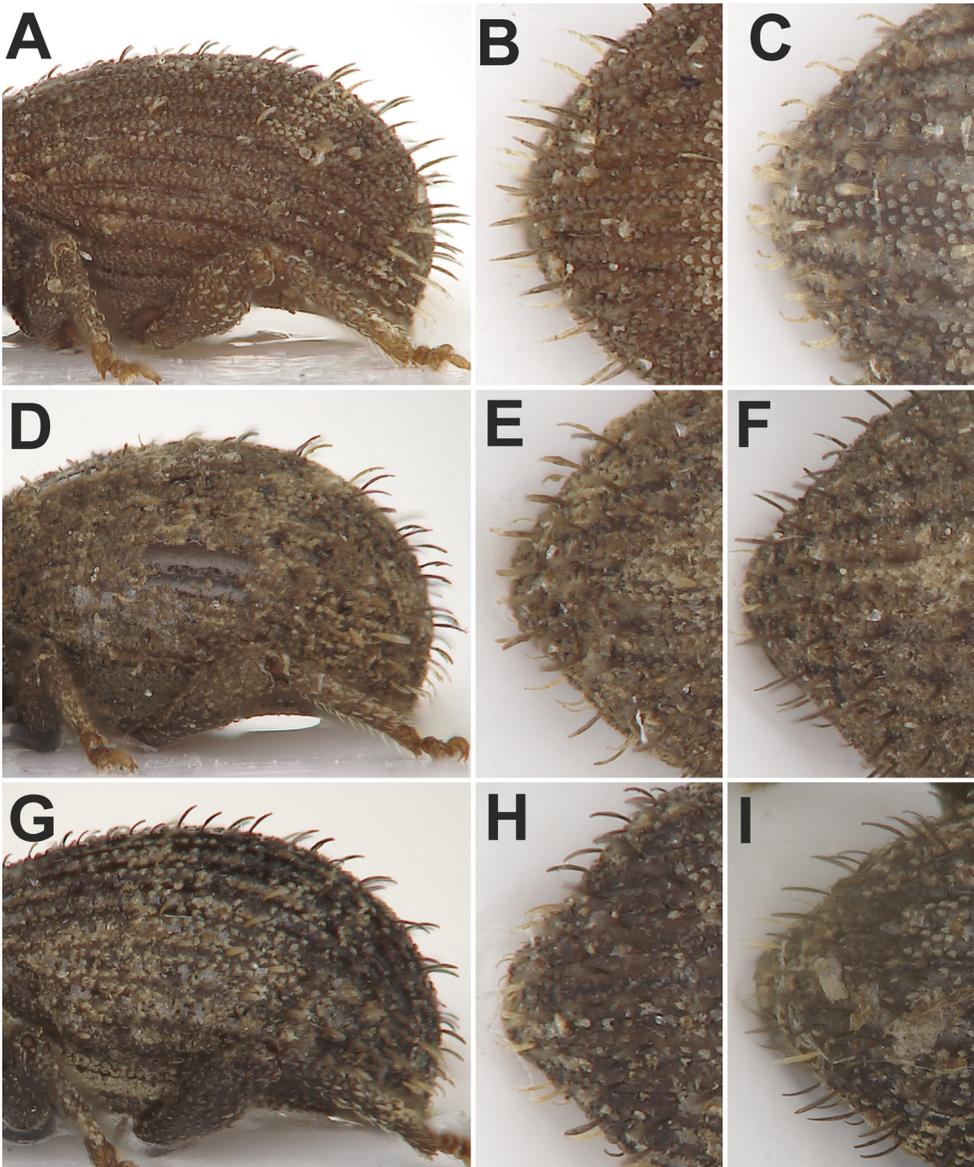


Fig. 2. Variability in elytral scales in three species. *Epistomius colonnellii* sp. nov. (A – lateral view, B, C – variability in dorsal view); *Epistomius natalensis* sp. nov. (D – lateral view, E, F – variability in dorsal view); *Epistomius niger* sp. nov. (G – lateral view, H, I – variability in dorsal view).

also show different shape of raised setae, because each new population is cloned without recombinations of genes. But this variability of amphigonic species in small regions is exceptional and for the time being known only from several other undescribed South African Trachyphloeini (R. Borovec, unpublished data). Although different shapes of setae suggest possibility of different species, these populations with different setae are conspecific in all other characters, as shape of rostrum, ratio of setal length in comparison between setae on the disc and posterior declivity, shape of antennal segments, tarsomeres, and penis. However, to conserve typical characters for all these three species, we include only one type of raised setae in the type series.

**Male genitalia.** Penis short, well sclerotised, tementes 3.1–4.7× longer than body of penis and 1.7–3.1× longer than tegminal manubrium; endophallus with thick flagellate sclerite (Figs 5G, 6G, 7G, 8G, 9G, 10G, 11G). Tegmen with moderately wide ring without parameres, its manubrium 1.3–2.3× as long as ring diameter. Sternite IX with spiculum gastrale anteriorly enlarged to flat, slender elongate plate, posteriorly with fused basal arms and with two very slender, regularly curved hemisternites. Shape of penis differing among the species (Figs 3A–G).

**Female genitalia.** Gonocoxites short and wide, evenly tapered apicad, with long and slender apical styli with tuft of 3–4 fine setae (Fig. 1C). Sternite VIII (Fig. 1C) with short and robust apodeme, 2.0–2.5× as long as plate, evenly enlarged to plate, terminating just inside plate and here also robust, reaching apical part of plate; plate subtriangular, with basal and apical margin slender but developed, tip of plate distinctly more sclerotised than remaining part of plate, Y-shaped, enlarged, prominent anteriorly. Spermatheca (Figs 5F, 6F, 7F, 8F, 9F, 10F, 11F) large, crescentic, with short and robust cornu and elongated corpus, irregularly tapered anteriorly and posteriorly, without differentiated nodulus and ramus. Gonocoxites, sternum VIII and also spermatheca not differing among the species.

**Etymology.** The Latin name of this new genus reflects the conspicuous large epistome. Gender is masculine.

**Biology.** All type material was collected either by sifting or in unbaited pitfall traps, all in afro-montane indigenous forest or rain forest. All species are amphigonic.

**Distribution.** Known only from South Africa, provinces Eastern Cape, KwaZulu-Natal, and Mpumalanga (Fig. 4).

**Species included.** Seven newly described species below.

**Taxonomical remarks.** *Epistomius* gen. nov. belongs to the tribe Trachyphloeini based on the following morphological characters: rostrum wider than its length; scrobes placed subdorsally, laterally directed towards the eyes and evanescent before them; epifrons with well defined margins along the whole length, at base as wide as the space between anterior eye margins; elytra without developed humeral calli, grown together; the entire dorsal part of body densely squamose; and metatibiae lacking corbels. The last character is in fact the only character allowing the separation of both tribes, Trachyphloeini and Embrithini, which include not only large arboricolous and floricolous genera and species, but also many small terricolous forms, for example *Afrophloeus* Borovec & Oberprieler, 2013, and also some still undescribed genera with undescribed species (Borovec, unpublished data).

The group of South African Trachyphloeini includes up to now only two described genera

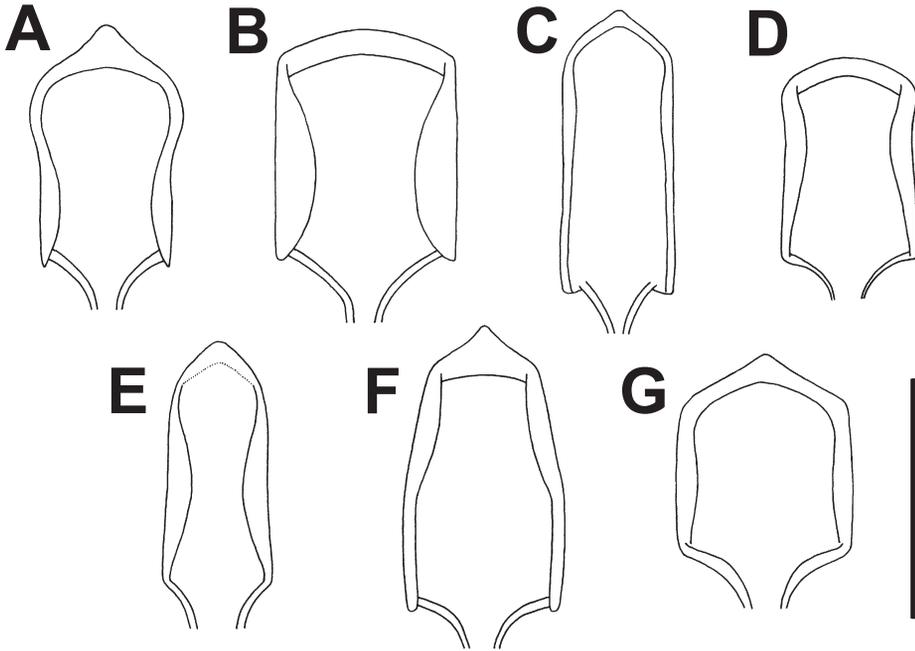


Fig. 3. Apex of penis. A – *Epistomius bulirschi* sp. nov.; B – *Epistomius colonnellii* sp. nov.; C – *Epistomius janaki* sp. nov.; D – *Epistomius natalensis* sp. nov.; E – *Epistomius ngomiensis* sp. nov.; F – *Epistomius niger* sp. nov.; G – *Epistomius wanati* sp. nov.

- *Pentatrachyphloeus* Voss, 1974 and *Nama* Borovec & Meregalli, 2013. The genus *Epistomius* gen. nov. is easily distinguishable from *Pentatrachyphloeus* species by the following characters: rostrum continuous with the head, without any transverse sulcus (vs. with slender transverse sulcus); protibiae slender and long, 5.5–6.4× as long as wide, with fringe of yellowish setae only at apex (vs. short and robust, 3.6–4.9× as long as wide, armed with 4–6 small, short and fine, sparse spines); frons glabrous (vs. squamose); ventrites glabrous (vs. densely squamose); epistome prominent anteriorly and laterally creating sharp teeth directed dorsally (vs. small, dorsally hardly visible); elytra without posthumeral calli (vs. with posthumeral calli); and tip of plate in female sternite VIII with distinct Y-shaped process, prominent anteriorly (vs. plate umbrella-shaped, apically broadly rounded). The genus *Epistomius* gen. nov. is also very easily distinguishable from the genus *Nama* mainly thanks to claws connected at base (*Nama* species has free claws).

The status of the new genus and its comparison with the known Palearctic Trachyphloeini genera is as follows: *Epistomius* gen. nov. differs from both *Trachyphloeus* and *Pentatrachyphloeus* in the identical set of characters, except that *Trachyphloeus* lacks the sulcus between head and rostrum, and posthumeral calli. The new genus, *Epistomius* gen. nov., may probably be close to genera *Pelletierellus* Borovec, 2009, *Zarazagaia* Borovec, 2009, and *Stuebenius* Borovec, 2009, due to the identical status of the following morphological characters: absent ocular lobes, striae in lateral part of head, laterally triangular scrobes, and claws connected at

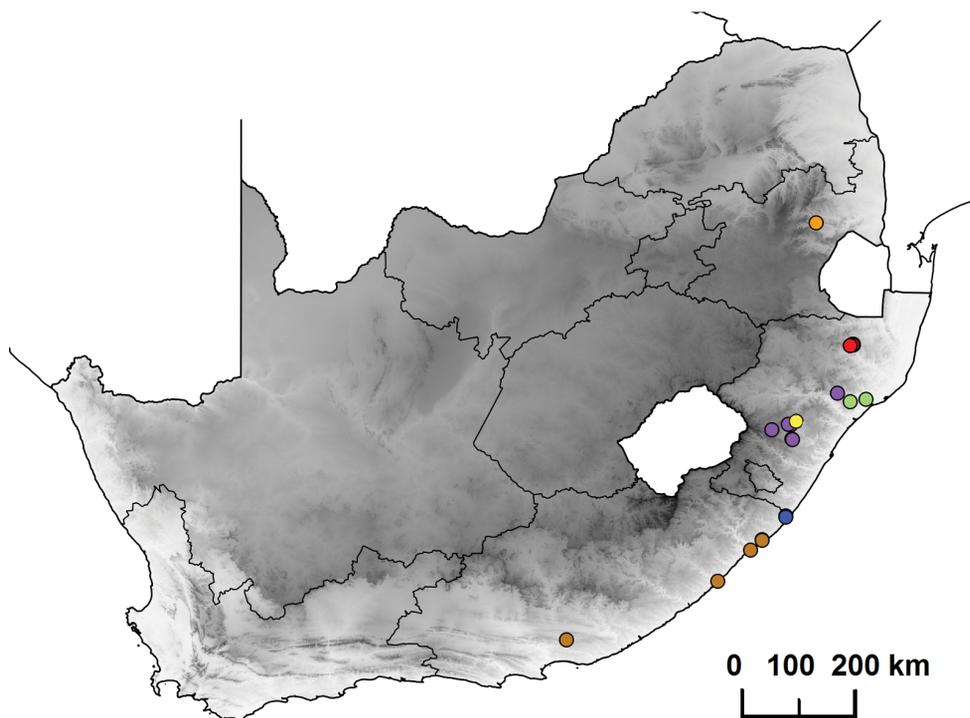


Fig. 4. Distribution of *Epistomius* species in South Africa; *Epistomius bulirschi* sp. nov. (yellow circle); *Epistomius colonnellii* sp. nov. (brown circles); *Epistomius janaki* sp. nov. (violet circles); *Epistomius natalensis* sp. nov. (blue circles); *Epistomius ngomiensis* sp. nov. (red circles); *Epistomius niger* sp. nov. (green circles); and *Epistomius wanati* sp. nov. (orange circle).

base. The new genus is well distinguishable from the first two mentioned genera also by rostrum not separated by shallow transverse furrow, pronotum without depressions and furrows, ventrites glabrous, tegmen lacking parameres, sternite VIII in females with apical Y-shaped process, and smaller body size; and from *Pelletierellus* also due to scrobes not visible dorsally. *Epistomius* gen. nov. is easily distinguishable from the genus *Stuebenius* by rostrum not separated by shallow transverse furrow, slender and moderately long scape and tibiae, ventrite 2 distinctly shorter than ventrites 3 and 4 together, suture between ventrite 1 and 2 straight, sternite VIII in females with short and robust apodeme, and with apical Y-shaped process.

#### *Epistomius bulirschi* sp. nov.

(Figs 3A, 5A–G)

**Type locality.** South Africa, KwaZulu-Natal, Karkloof Forest, Bushwillow to waterfall trail, km 1–3, 29°30'17"S, 30°29'76"E, 1350–1500 m a.s.l.

**Type material.** HOLOTYPE: ♂, 'RSA (E) [South Africa, East], KwaZulu-Natal, 29.3017S/30.2976E, Karkloof Forest, Bushwillow to waterfall trail, km 1-3, sifting, 1350-1500 m, 8.11.2013, leg. M. Wanat' (TMSA). PARATYPES: 11 ♂♀, the same data as holotype (MNH, RBSC).

**Description** (Figs 5A–G). Body length 1.63–2.09 mm, holotype 1.98 mm. Body dark brownish to blackish, antennae reddish brown but club blackish, sometimes apical part of scape slightly darker, short apical part of tibiae and tarsi yellowish red to reddish brown. Elytra sparsely covered with appressed scales of irregular shape, 3 across width of one interval, subrounded, star- to fan-shaped, with short fringes, leaving short distance between scales. Pronotum and head with rostrum with fan-shaped scales with fringes, scales on pronotum sparse, on head with rostrum dense, almost covering integument. Appressed scales on scape, femora and tibiae identical to elytral ones but smaller. Setae on elytra inconspicuous, semiappressed, subspatulate, on basal half shorter than half width of one interval, on apical half about as long as half width of one interval, twice as long as setae on basal half, distance between two setae on posterior declivity more than twice the length of one seta. Setae on pronotum and head with rostrum subspatulate, short, about equal to those of basal half of elytra, semiappressed, hardly prominent in lateral view, setae on interocular space twice as long as the others. Scape, femora and tibiae with short, long-oval semiappressed setae, hardly prominent from outline. Body vestiture light greyish brown, elytra with moderately large dark brownish spot on disc, pronotum with two wide, longitudinal, curved dark brownish stripes.

*Head* (Figs 5A–D). Rostrum in males (Fig. 5B) extremely enlarged in apical half, apical part distinctly prominent laterally, 1.19–1.27× as wide as long, at apex 1.14–1.17× as wide as at base and equally wide as head including eyes; in females (Fig. 5C) parallel-sided, in apical half indistinctly enlarged around scrobes, 1.08–1.09× as wide as long, at apex 0.96–0.98× as wide as at base, distinctly narrower than head including eyes. Epifrons when cleared of scales shiny, smooth, unpunctured, with very slender longitudinal median stria and with two inconspicuous lateral longitudinal keels weakly tapered posteriad. Frons deepened, smooth. Epistome in males wider than width of epifrons at midlength, in females narrow, about equally wide as epifrons at midlength. Head when cleared of scales shiny and smooth, with very small fovea and with several very short and fine, almost indistinct longitudinal striae in middle. Eyes faintly prominent from outline of head.

*Antennae* (Fig. 5A). Antennal scape 5.5–5.8× as long as wide and 1.6–1.7× as long as funicle, at apex 0.9× as wide as club. Funicle segment I 1.9–2.0× as long as wide and 2.0× as long as segment II, which is 1.1× as long as wide; segments III–VI 1.6–1.7× as wide as long; segment VII 1.3× as wide as long. Club 2.3–2.4× as long as wide.

*Pronotum* (Fig. 5A) 1.33–1.43× as wide as long, widest behind midlength, with distinctly rounded sides, more tapered anteriorly than posteriorly, weakly constricted behind anterior margin. When cleared of scales regularly convex, shiny, sparsely irregularly coarsely punctured, with 6–7 punctures along the length, punctures moderately large, distance between punctures about equal to their diameter, behind anterior margin bordered by transverse sparse row of finer punctures. Pronotum in lateral view weakly convex, behind anterior border lowered.

*Elytra* (Fig. 5A) in males 1.09–1.13× as long as wide, in females 1.14–1.17× as long as wide.

*Legs* (Figs 5A, E). Tarsomere II 1.6–1.7× as wide as long; tarsomere III 1.4× as wide as long and 1.4× as wide as tarsomere II; onychium 1.6–1.7× as long as tarsomere III.

*Male genitalia* (Figs 3A, 5G). Penis short but weakly longer than wide, narrowest at base, in basal third subparallel-sided, in middle third weakly enlarged apically, in apical third

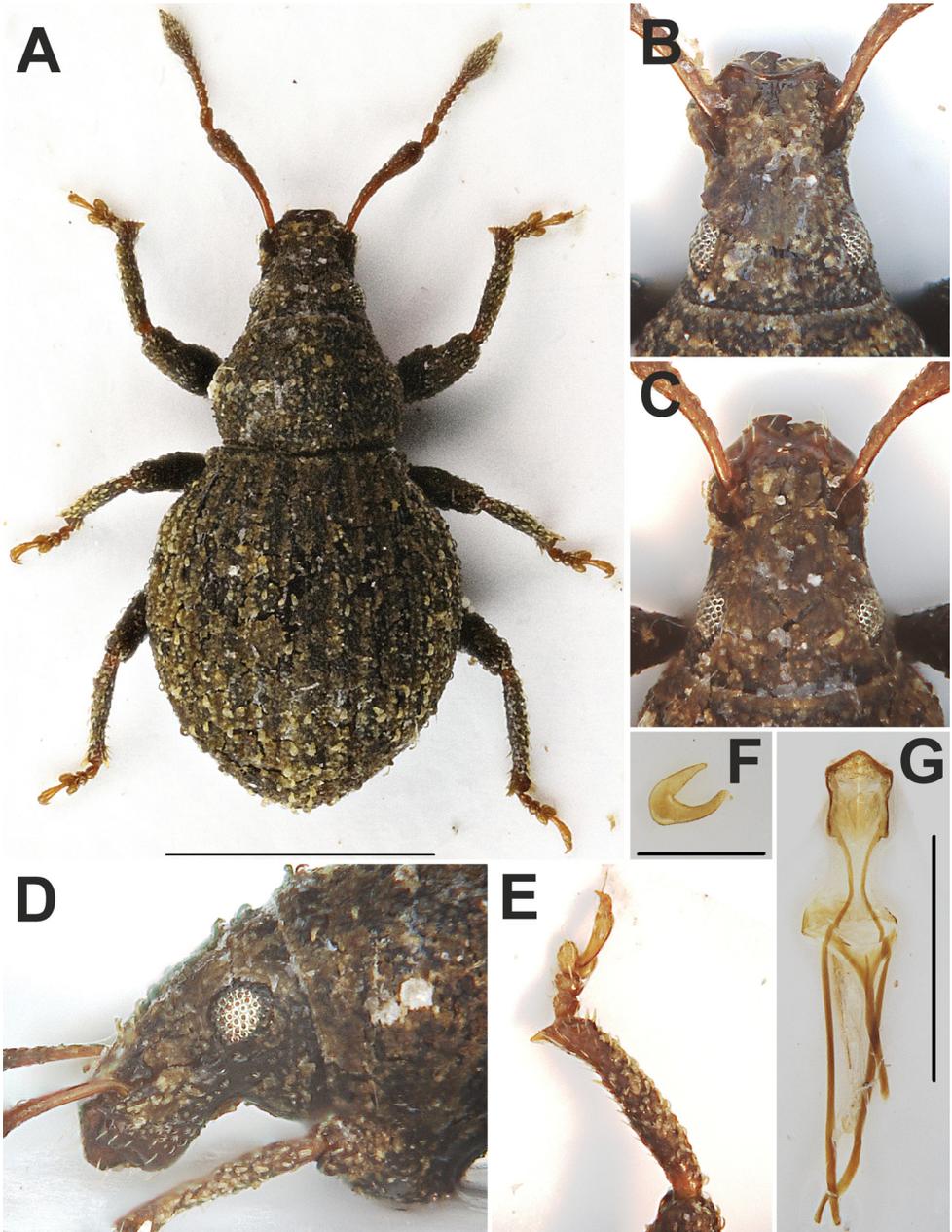


Fig. 5. *Epistomius bulirschi* sp. nov. A – habitus, dorsal view, holotype, male; B – rostrum, male, dorsal view; C – rostrum, female, dorsal view; D – rostrum, male, lateral view; E – protibia, male; F – spermatheca; G – aedeagus. Scale bars: 1 mm (A), 0.5 mm (G) and 0.2 mm (F).

subtriangular, evenly tapered apicad; in lateral view weakly curved with slender lengthened tip in apical third.

**Etymology.** Species is dedicated to Petr Bulirsch (Prague, Czech Republic), a Carabidae specialist, who provided an extensive material of small sifted entomines from South Africa to the first author.

**Biology.** The type material was sifted from forest litter.

**Distribution.** South Africa: KwaZulu-Natal (Fig. 4).

**Differential diagnosis.** The species is characterized by elytral setae on apical declivity semiappressed, rostrum in males distinctly enlarged anteriorly, at apex equally wide as head including eyes, and by penis short, at apex regularly triangular, in basal half concave. This set of characters easily distinguishes *E. bulirschii* sp. nov. from all other species of the genus.

### *Epistomius colonnellii* sp. nov.

(Figs 1A–C, 2A–C, 3B, 6A–G)

**Type locality.** South Africa, Eastern Cape, Mbotyi Forest, 31°27'S, 29°44'E.

**Type material.** HOLOTYPE: ♂, 'South Africa, Eastern Cape, Mbotyi Forest, 31°27'S, 29°44'E, 1.–3.xii.2006, forest litter, sifting, J. Janák lgt.' (TMSA). PARATYPES: 28 ♂♀, the same data as holotype (JJRC, JSPC, NMPC, RBSC); 14 ♂♂, 'South Africa, Eastern Cape, Grahamstown, Alicedale, Blaukranz (forest), 15.XI.2006, G. Osella lgt.'; 12 ♂♀, 'South Africa, Eastern Cape, Port St. Johns (foresta), 10.XI.2006, G. Osella lgt.'; 203 ♂♀, 'South Africa, Eastern Cape, 5 km S-E di Port St. Johns (foresta costiera), S 31°36'58" E 29°34'61", 8.XI.2006, G. Osella leg. (GOVI); 14 ♂♀, 'South Africa: E [Eastern] Cape, Port St. Johns – second plage, 31.38.66 S, 29.31.25 E, 8/9.XI.2006, E. Colonnelli [lgt.]'; 14 ♂♀, 'South Africa, E [Eastern] Cape, 5 km E Port St. Johns, 31°36'58" S, 29°34'61" E, 8/9.XI.2006, E. Colonnelli [lgt.]'; 11 ♂♀, 'RSA [South Africa]: Eastern Cape (Transkei), Mbotyi Coast and Forest, 29.XI.-3. XII.2003, leg. W. Schawaller' (SMNS); 2 ♂♀, 'RSA (E) [South Africa, East], E [Eastern] Cape, Silaka Nat. Res. (top) nr. Port St. Johns, 31.6518 S/29.4999 E, 13.11.2013, 150 m, sifted litter, leg. M. Wanat' (MNH); 48 ♂♀, 'South Africa, Eastern Cape, Silaka NR, Port St. John env., 31°39.0' S 29°30.3' E, 14.i.2016, J. Janák lgt.' (JJRC, RBSC). **Additional material examined.** 28 ♂♀, 'South Africa, Eastern Cape, Cwebe NR, 32°13.6' S 28°53.8' E, 17.–18. ii.2014, J. Janák lgt.' (JJRC, RBSC).

**Description** (Figs 1A–C, 2A–C, 6A–G). Body length 1.88–2.56 mm, holotype 2.29 mm. Body dark brownish to blackish, scape and funicle reddish brown, apical quarter of tibiae and tarsi yellowish red. Elytra with sparse appressed scales of irregular shape, 4 across width of one interval, subsquared or subtriangular, finely longitudinally striate, in some scales with short fine fringes on one edge of scale; distance between two scales about as long as half diameter of one scale. Pronotum and head with rostrum with dense subrounded scales, with fine fan-shaped striae, creating short, fine and dense fringes on almost half of circumference, scales leaving only short spaces between them. Appressed scales on scape, femora and tibiae identical to pronotal ones, only slightly smaller. Perpendicularly erect elytral setae conspicuous, on posterior declivity distinctly longer than on disc, here longer than width of interval, slender, lancet-shaped, regularly sharply tapered apicad, finely longitudinally striate, creating one regular row on each interval, distance between two setae on posterior declivity slightly shorter than length of one seta. Setae on pronotum and head with rostrum somewhat shorter than setae on anterior part of elytra, perpendicularly erect, slender, subparallel-sided, setae on interocular space twice as long as the others. Scape, femora and tibiae with short, long-oval, semiappressed setae, densely irregularly scattered, hardly visible, not prominent

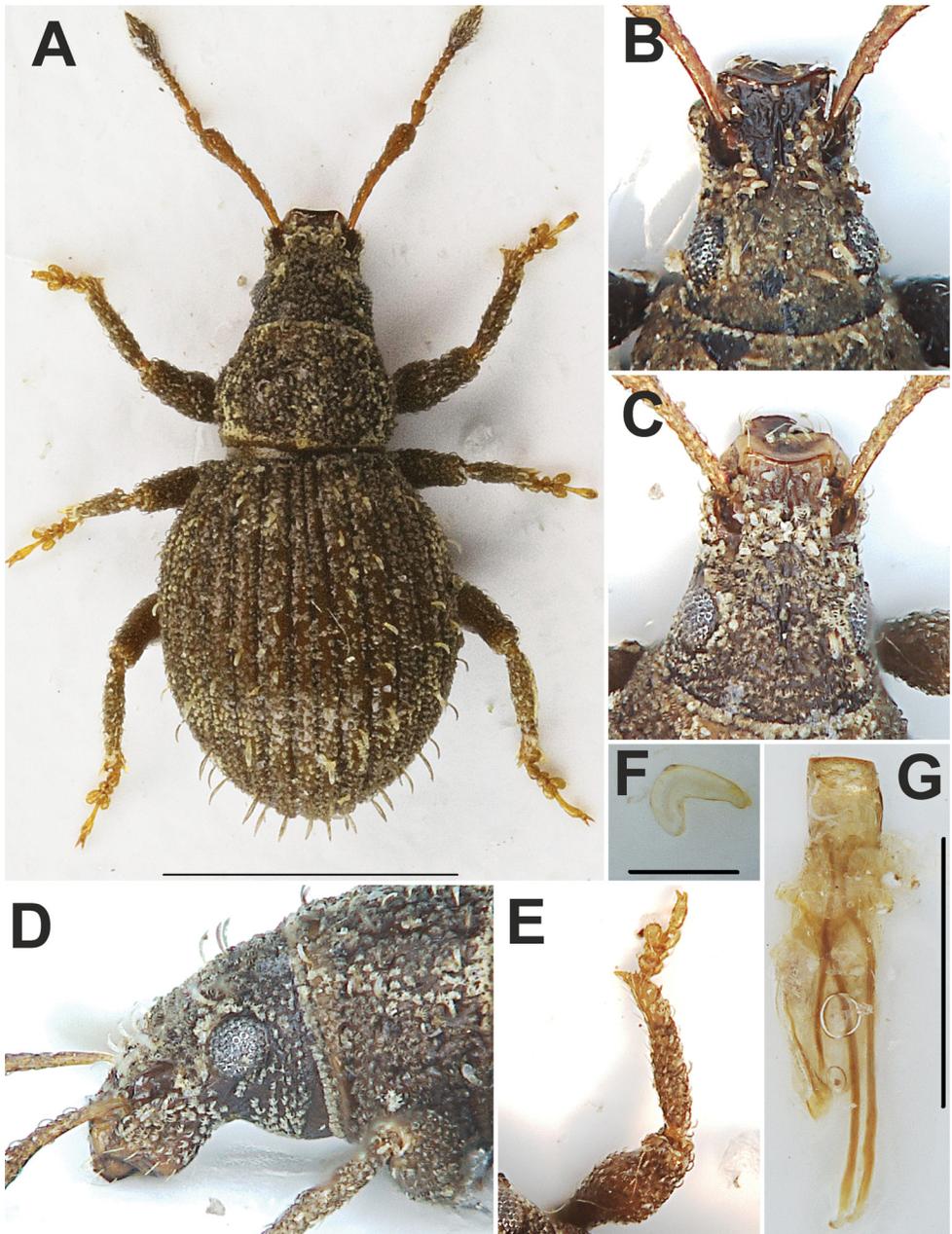


Fig. 6. *Epistomius colonnellii* sp. nov. A – habitus, dorsal view, holotype, male; B – rostrum, male, dorsal view; C – rostrum, female, dorsal view; D – rostrum, male, lateral view; E – protibia, male; F – spermatheca; G – aedeagus. Scale bars: 1 mm (A), 0.5 mm (G) and 0.2 mm (F).

from outline. Body vestiture light brownish with partly visible integumental colour, elytra with slender greyish V-shaped transverse stria on posterior declivity; pronotum with three slender longitudinal greyish striae; erect setae light brownish.

*Head* (Figs 1A, 6A–C). Rostrum in males (Fig. 6B) distinctly tapered in basal half and enlarged in apical half, with concave sides and subparallel-sided in females (Fig. 6C), slightly tapered in basal half and indistinctly enlarged in apical half, rounded around scrobes, in males 1.15–1.17× as wide as long, at apex 1.01–1.07× as wide as at base; in females 1.27–1.33× as wide as long, at base 1.04–1.07× as wide as at apex. Epifrons with slender longitudinal median stria, when cleared of scales shiny, with moderately wide longitudinal median furrow along whole length, with two very slender longitudinal keels along whole length, weakly tapered basad and with several short, irregular longitudinal striae. Frons deepened, finely irregularly rough. Epistome in males wide, wider than epifrons at midlength, in females narrow, equally wide as epifrons at midlength. Head when cleared of scales with several fine and short longitudinal striae radiating from base of epifrons furrow, not reaching anterior border of pronotum. Eyes faintly prominent from outline of head.

*Antennae* (Fig. 6A). Antennal scape 6.0–6.1× as long as wide and 1.5× as long as funicle, club 1.1× as wide as scape at apex. Funicle segment I 1.9–2.0× as long as wide and 1.8–2.0× as long as segment II, which is 1.6–1.7× as long as wide; segments III–V 1.1–1.2× as wide as long; segment VI 1.1× as wide as long; segment VII isodiametric. Club 2.4–2.6× as long as wide.

*Pronotum* (Fig. 6A) in males 1.40–1.48×, in females 1.45–1.50× as wide as long, widest just behind midlength, with distinctly, regularly rounded sides, constricted behind anterior border. When cleared of scales regularly convex, shiny, sparsely irregularly coarsely punctured by large deep punctures, distance between them shorter than diameter of one puncture, anterior border reddish, bordered by transverse row of small punctures. Pronotum in lateral view almost flat, lowered behind anterior border.

*Elytra* (Fig. 6A) in males 1.15–1.18×, in females 1.17–1.22× as long as wide.

*Legs* (Figs 6A, E). Tarsomere II 1.3–1.4× as wide as long; tarsomere III 1.3× as wide as long and 1.4–1.5× as wide as tarsomere II; onychium 1.5× as long as tarsomere III.

*Male genitalia* (Figs 3B, 6G). Penis very short and wide, only slightly longer than wide, subparallel-sided with slightly rounded sides, apex obtuse, only slightly pointed.

*Variability* (Figs 2A–C). While material from Mbotyi Forest, Port St. Johns and Grahamstown has elytral setae perpendicularly erect and straight, on posterior disc longer than width of interval, slender, lancet-shaped and regularly sharply tapered apicad, material from the locality Cwebe has setae bent posteriad, as long as width of one interval, subspatulate, apically rounded. The material from Cwebe was not included in the type series to conserve the typical characters (see the variability chapter in *Epistomius* description).

**Etymology.** We are honoured to name the newly described species after our good friend, Enzo Colonnelli (Rome, Italy), an eminent specialist in weevils, mainly Ceutorhynchinae, who collected part of the type material.

**Biology.** All material was sifted from native forest litter.

**Distribution.** South Africa: Eastern Cape (Fig. 4).

**Differential diagnosis.** The species is characterized by elytral setae on apical declivity semierect

to erect, rostrum in males enlarged apicad, with epistome wider than epifrons. It is similar to *E. janaki* sp. nov., from which it can be distinguished by the following characters: elytral setae on posterior declivity long and slender, pointed, twice as long as conspicuous setae on basal half; tarsomere II 1.3–1.4× as wide as long; elytra in males longer, 1.15–1.18× as long as wide; and penis short, about as long as wide, at apex obtuse, tip not separated.

### *Epistomius janaki* sp. nov.

(Figs 3C, 7A–G)

**Type locality.** South Africa, KwaZulu Natal, Howick, Karkloof Range, 29°19.1'S, 30°15.5'E, 1325 m a.s.l.

**Type material.** HOLOTYPE: ♂, 'South Africa, KwaZulu Natal, Howick, Karkloof Range, 29°19.1' S 30°15.5' E, 23.xi.2006, 1325 m, J. Janák lgt.' (TMSA). PARATYPES: 16 ♂♀, the same data as holotype (JJRC, JSPC, NMPC, RBSC); 7 ♂♀, 'South Africa, KwaZulu Natal, Karkloof NR, 29°18.5' S 30°13.2' E, 2.i.2015, indig. forest, J. Janák lgt.' (JJRC, RBSC); 23 ♂♀, 'RSA (E) [South Africa, East], KwaZulu-Natal, Doreen Clark Nat. Res. nr. Pietermaritzburg, 29.5787 S/30.2892 E, 7.11.2013, 1110 m, sifted litter, leg. M. Wanat' (MNHV); 17 ♂♀, 'South Africa, KwaZulu-Natal, Fort Nottingham Nat. Reserve, 29°24.6' S 29°54.8' E, 22.i.2016, ind. forest, Berlese extraction, leaf & log litter, sifting, J. Janák lgt.' (JJRC, RBSC); 1 ♂, 'South Africa, KwaZulu Natal, PMB env.-Sweetwaters NR, 29°35.65' S 30°18.0' E, 3.i.2015, indig. forest, J. Janák lgt.' (RBSC); 2 ♂♀, 'South Africa, KwaZulu Natal, Nkandla Forest Reserve, 28°43.8' S 31°8.3-8.4' E, 4.i.2015, indig. forest, J. Janák lgt.' (RBSC).

**Description** (Figs 7A–G). Body length 1.63–2.06 mm, holotype 1.65 mm. Body dark brownish, basal half of scape or complete scape, funicle, club, short apical part of tibiae and tarsi reddish brown, tarsi sometimes paler. Elytra with moderately sparse appressed scales, 3–4 across width of one interval, irregularly subcircular, finely longitudinally striate. Pronotum and head with rostrum with dense subcircular scales, with fine fan-shaped striae, creating short, fine and dense fringes on almost half of circumference, almost covering integument. Appressed scales on scape, femora and tibiae similar to pronotal ones, slightly smaller. Elytra with subspatulate setae, apically rounded, finely longitudinally striate, creating one regular row on each interval, distance between two setae on posterior part slightly longer than length of one seta, very different on anterior third and posterior declivity. Anterior third with setae semiappressed, inconspicuous, about as long as half width of interval, posterior declivity with setae erect, about as long as width of one interval. Pronotum and head with rostrum with semiappressed subspatulate setae similar to those on anterior part of elytra, irregularly scattered, setae on interocular space twice as long as the others. Scape, femora and tibiae with short, long-oval semiappressed setae, densely irregularly scattered, hardly visible, not prominent from outline. Body vestiture light brownish, raised setae paler, greyish brown.

**Head** (Figs 7A–D). Rostrum in both sexes (Figs 7B–C) in basal third tapered apicad, in apical two thirds regularly enlarged apicad, in males more than in females, in males (Fig. 7B) 1.10–1.16× as wide as long, at apex 1.04–1.05× as wide as at base; in females (Fig. 7C) 1.18–1.22× as wide as long, at base as wide as at apex, in both sexes at apex distinctly narrower than head including eyes. Epifrons with slender longitudinal median stria, when cleared of scales shiny with two very slender keels, distinctly enlarged apicad from fovea at interocular space and creating triangular, shallowly deepened space with several fine punctures and short striae and with very slender and fine longitudinal median stria. Frons deepened, shortly densely and finely longitudinally striate. Epistome in males wider than epifrons at midlength, in females narrower, about equally wide as epifrons at midlength. Head when cleared of scales

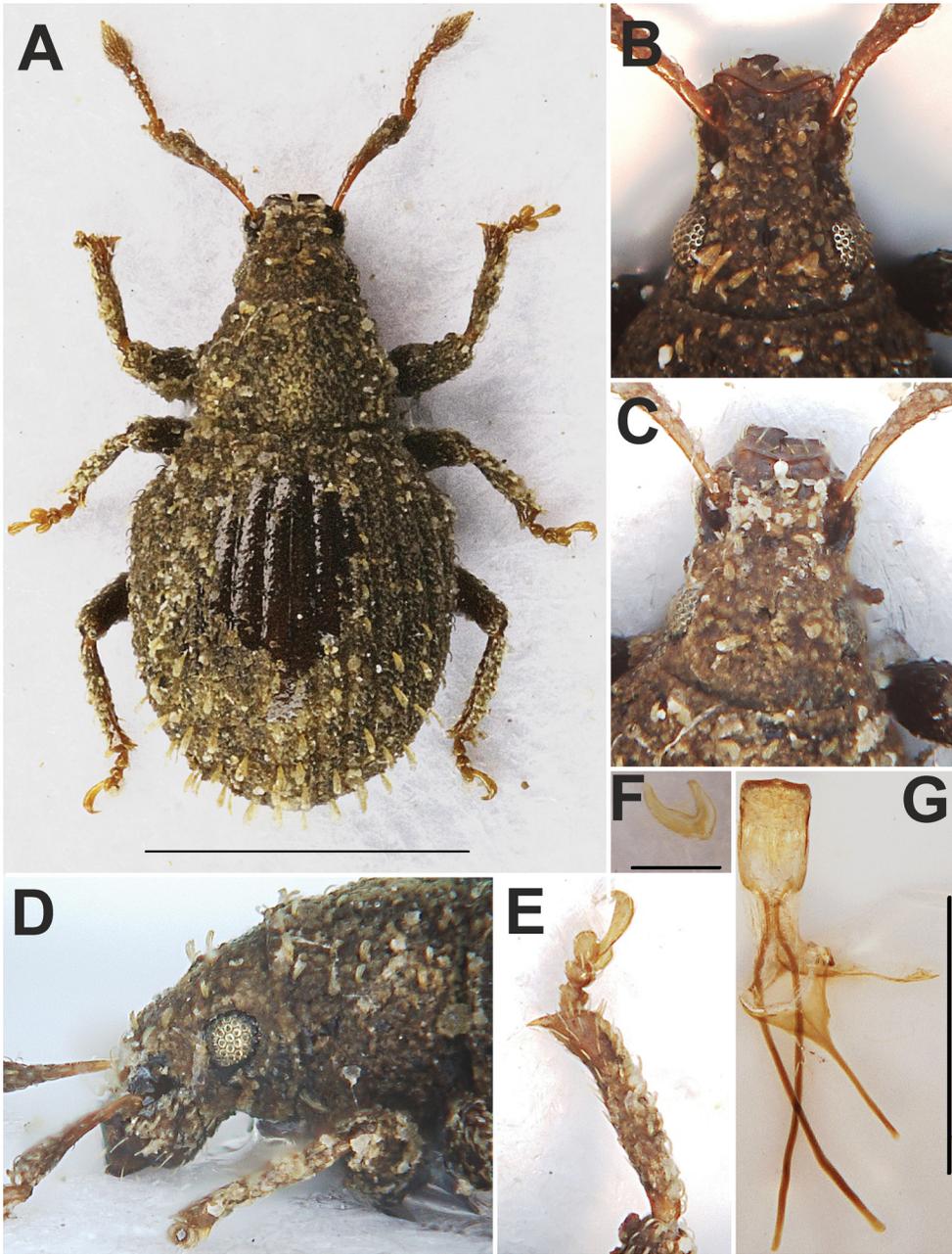


Fig. 7. *Epistomius janaki* sp. nov. A – habitus, dorsal view, holotype, male; B – rostrum, male, dorsal view; C – rostrum, female, dorsal view; D – rostrum, male, lateral view; E – protibia, male; F – spermatheca; G – aedeagus. Scale bars: 1 mm (A), 0.5 mm (G) and 0.2 mm (F).

convex with fine longitudinal striae, radiate from fovea posteriad. Eyes weakly prominent from outline of head.

*Antennae* (Fig. 7A). Antennal scape 4.9–5.0× as long as wide and 1.5–1.6× as long as funicle, at apex equally wide as club. Funicle segment I 1.7–1.8× as long as wide and 1.7–1.8× as long as segment II, which is 1.3–1.4× as long as wide; segments III–V 1.3–1.4× as wide as long; segment VI 1.4–1.5× as wide as long; segment VII 1.3–1.4× as wide as long. Club 1.9–2.0× as long as wide.

*Pronotum* (Fig. 7A) in males 1.50–1.53×, in females 1.56–1.64× as wide as long, widest just behind midlength, with distinctly rounded sides. When cleared of scales regularly convex, shiny, sparsely irregularly coarsely punctured, punctures shallow with small ring inside, distance between two punctures shorter than diameter of one puncture, anterior border dark brownish, bordered by transverse dense row of fine punctures. Pronotum in lateral view slightly convex, behind anterior border lowered.

*Elytra* (Fig. 7A) in males 1.12–1.14×, in females 1.20–1.28× as long as wide.

*Legs* (Figs 7A, E). Tarsomere II 1.5–1.6× as wide as long; tarsomere III 1.3× as wide as long and 1.2–1.3× as wide as tarsomere II; onychium 1.5× as long as tarsomere III.

*Male genitalia* (Figs 3C, 7G). Penis longer than wide, slender, widest in apical third, apically broadly rounded with separated small tip.

**Etymology.** The new species is dedicated to a long-time friend of the first author, Jiří Janák (Rtyně nad Bílinou, Czech Republic), an eminent specialist in Staphylinidae of the Palaearctic and Afrotropical Regions and collector of part of the type material, who directed the first author to specialise in weevils, when both had just started their interest in entomology.

**Biology.** The type material was sifted from native forest litter.

**Distribution.** South Africa: KwaZulu-Natal (Fig. 4).

**Differential diagnosis.** The species is characterized by elytral setae on apical declivity semi-erect to erect, rostrum in males enlarged apicad, with epistome wider than epifrons, and it is thus similar to *E. colonnellii* sp. nov., from which it can be distinguished by the following characters: elytral setae on posterior declivity subspatulate, rounded apicad, 4–5× as long as inconspicuous setae on basal half; tarsomere II 1.5–1.6× as wide as long; elytra in males shorter, 1.12–1.14× as long as wide; and penis distinctly longer than wide, with separated tip at apex and concave before it.

### *Epistomius natalensis* sp. nov.

(Figs 2D–F, 3D, 8A–G)

**Type locality.** South Africa, KwaZulu-Natal, Umtamwuna Nat. Res., trail from Beacon Hill, 31°01'09" S 30°16'97" E, 200–250 m a.s.l., rainforest.

**Type material.** HOLOTYPE: ♂, 'RSA (E) [South Africa, East], KwaZulu-Natal, 31.0109S/30.1697E, Umtamwuna Nat. Res., trail from Beacon Hill, 10.11.2013, 200–250 m, rainforest, sifted litter, leg. M. Wanat' (TMSA). PARATYPES: 32 ♂♀, the same data as holotype (MNHW, RBSC).

**Additional material examined.** 21 ♂♀, 'South Africa, KwaZulu Natal, Umtavuna Nature Reserve, 31°1.5-6' S 30°10.1-2' E, 13.i.2016, J. Janák lgt.' (JJRC, JSPC, NMPC, RBSC).

**Description** (Figs 2D–F, 8A–G). Body length 2.06–2.41 mm, holotype 2.15 mm. Body dark brownish to blackish, antennae reddish brown, sometimes apical part of scape or club darker,

short apical part of tibiae and tarsi yellowish red to reddish brown. Elytra sparsely covered with appressed scales of irregular shape, rounded to angular, some of them with short fringes, 4 across width of one interval, leaving narrow spaces between them. Pronotum and head with rostrum with dense, irregularly shaped scales, subrounded on pronotal disc and head with rostrum, fan-shaped with fringes on lateral pronotal parts, on head and rostrum almost covering integument. Appressed scales on scape, femora and tibiae identical to those on pronotal disc, smaller and sparser. Elytral setae on basal half semiappressed, subspatulate, about as long as half width of one interval, on apical half perpendicularly erect, long and slender, lancet-shaped, somewhat longer than width of one interval, with indistinct concavity just at apex or pointed, 3–4× longer than setae on basal half, distance of two setae on posterior declivity somewhat longer than length of one setae. Pronotum and head with rostrum with setae somewhat shorter than setae on basal half of elytra, sparse, inconspicuous, semierect, subspatulate, setae on interocular space twice as long as the others. Scape, femora and tibiae with short, long-oval semiappressed setae, hardly prominent from outline. Body vestiture light greyish brown.

*Head* (Figs 8A–D). Rostrum in both sexes (Figs 8B–C) identical, in basal half slightly tapered apicad with straight sides, in apical half indistinctly enlarged around scrobes, not prominent laterally, 1.09–1.15× as wide as long, equally wide at base and at apex, at apex distinctly narrower than head including eyes. Epifrons with distinct longitudinal median stria along whole length, when cleared of scales shiny, smooth, unpunctured, with slender median longitudinal stria, shallowly regularly longitudinally depressed. Frons deepened, smooth. Epistome in both sexes narrow, about equally wide as epifrons at midlength. Head when cleared of scales shiny and smooth, unpunctured, with slender longitudinal fovea. Eyes faintly prominent from outline of head.

*Antennae* (Fig. 8A). Antennal scape 5.4–6.1× as long as wide and 1.5× as long as funicle, at apex equally wide as club. Funicle segment I 1.5–1.6× as long as wide and 1.7–1.8× as long as segment II, which is 1.2–1.3× as long as wide; segments III–VI 1.4× as long as wide; segment VII 1.3× as wide as long. Club 2.0–2.1× as long as wide.

*Pronotum* (Fig. 8A) 1.47–1.56× as wide as long, widest behind midlength, with distinctly rounded sides, behind anterior margin weakly constricted. When cleared of scales regularly convex, shiny, moderately densely coarsely punctured, punctures very large, 6–7 along whole length, distance between two punctures about equal to semidiameter of one puncture. Pronotum in lateral view weakly convex, behind anterior border lowered.

*Elytra* (Fig. 8A) in males 1.15–1.18×, in females 1.17–1.22× as long as wide.

*Legs* (Figs 8A, E). Tarsomere II 1.5–1.6× as wide as long; tarsomere III 1.4× as wide as long and 1.4–1.5× as wide as tarsomere II; onychium 1.5× as long as tarsomere III.

*Male genitalia* (Figs 3D, 8G). Penis somewhat longer than wide, narrowest at base, in apical half distinctly enlarged, almost regularly rounded; laterally almost straight, wide, at apex regularly tapered.

*Variability* (Figs 2D–F). Width of erect elytral setae varying between very slender and sharply pointed to weakly wider, narrowly dully pointed. But all these types keep the same form – lancet-shaped, and also the same length, mainly in comparison between setae on the disc and posterior declivity. The material from the locality Umtavuna was not included in

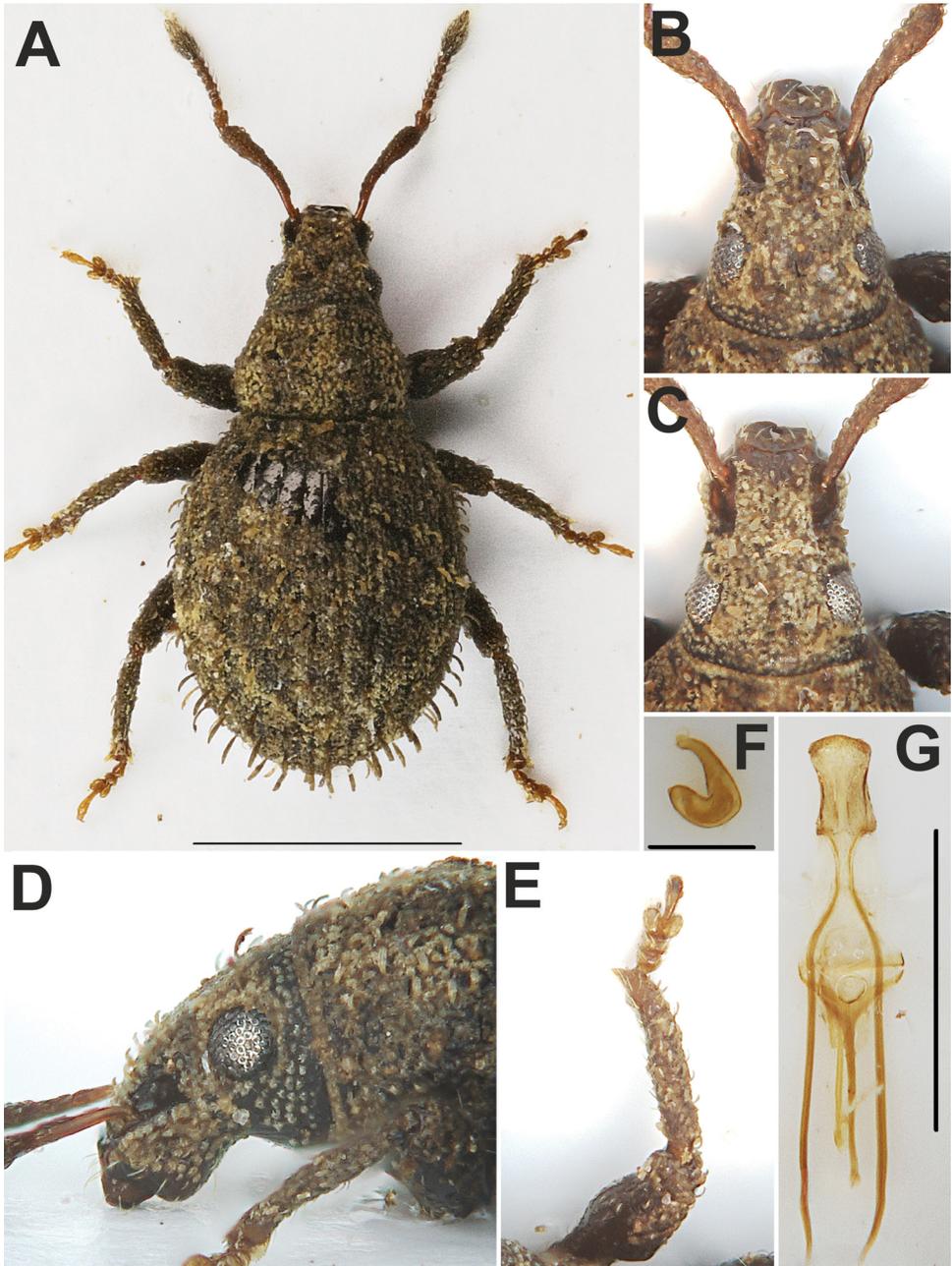


Fig. 8. *Epistomius natalensis* sp. nov. A – habitus, dorsal view, holotype, male; B – rostrum, male, dorsal view; C – rostrum, female, dorsal view; D – rostrum, male, lateral view; E – protibia, male; F – spermatheca; G – aedeagus. Scale bars: 1 mm (A), 0.5 mm (G) and 0.2 mm (F).

the type series to conserve the typical characters (see the variability chapter in *Epistomius* description).

**Etymology.** Patronymic, named after district Kwa-Zulu-Natal, where the type locality is placed.

**Biology.** The type material was sifted from native forest litter.

**Distribution.** South Africa: KwaZulu-Natal (Fig. 4).

**Differential diagnosis.** The species is characterized by elytral setae on apical declivity semierect to erect, rostrum in both sexes subparallel-sided with epistome in both sexes equal, as wide as epifrons at midlength, and it is similar to *E. wanati* sp. nov., from which it can be distinguished by the following characters: elytral setae on basal half short, semiappressed, on apical half longer than width of one interval, lancet-shaped, laterally weakly curved, 3–4× as long as setae on basal half; funicle segments 3–5 1.4× as wide as long; club long and slender, 2.0–2.1× as long as wide; and penis slender, longer than wide, widest in apical third, rounded, laterally wide.

***Epistomius ngomiensis* sp. nov.**

(Figs 3E, 9A–G)

**Type locality.** South Africa, KwaZulu-Natal, Ngome State Forest, 27°49.3'S, 31°25.0'E, 1150 m a.s.l.

**Type material.** HOLOTYPE: ♂, 'South Africa: KZN [KwaZulu-Natal], Ngome State Forest, 27°49.3' S 31°25.0' E, 18.ix.1992-18.x.1992, 1150m, Unbaited pitfall trap in dense afro-montane indigenous forest, Ngome Arthropod Survey, University of Pretoria, Sample 10/92-3A, M.v.d. Merwe [lgt.]' (SANC). PARATYPES: 1 ♂, the same data as holotype (SANC); 1 ♂, the same data as holotype, but '27°50.1' S 31°25.5' E, 1010m, Sample 10/92-2B'; 1 ♂, the same data as holotype, but '27°50.1' S 31°25.5' E, 18.vii.1992-18.viii.1992, 1010m, Sample 08/92-2B'; 4 spec., the same data as holotype, but '27°49.5' S 31°25.4' E, 18.i.1992-18.ii.1992, 1100m, Sample 02/92-2D'; 2 spec., the same data as holotype, but '27°49.5' S 31°25.2' E, 17.xii.1992-16.i.1993, 1130m, Sample 01/93-2A'; 1 spec., the same data as holotype, but '27°50.1' S 31°25.5' E, 18.viii.1992-18.ix.1992, 1010m, Sample 09/92-2B'; 2 spec., the same data as holotype, but '18.x.1992-18.xi.1992, 1150m, Sample 11/92-3A'; 1 spec., the same data as holotype, but '27°49.5' S 31°25.2' E, 18.ix.1992-18.x.1992, 1130m, Sample 10/92-2A'; 1 spec., the same data as holotype, but '27°49.4' S 31°25.7' E, 17.xii.1992-16.i.1993, 1140m, Sample 01/93-4B'; 1 spec., the same data as holotype, but '27°49.5' S 31°25.4' E, 18.x.1992-18.xi.1992, 1100m, Sample 11/92-2D'; 1 spec., the same data as holotype, but '27°50.5' S 31°25.2' E, 18.viii.1992-18.ix.1992, 1040m, Sample 09/92-2C'; 2 spec., the same data as holotype, but '27°49.5' S 31°25.2' E, 18.xi.1992-17.xii.1992, 1130m, Sample 12/92-2A'; 1 spec., the same data as holotype, but '27°49.5' S 31°25.2' E, 18.viii.1992-18.ix.1992, 1130m, Sample 09/92-2A'; 1 spec., the same data as holotype, but '27°49.5' S 31°25.4' E, 18.vii.1992-18.viii.1992, 1100m, Sample 08/92-2D'; 1 spec., the same data as holotype, but '18.vii.1992-18.viii.1992, Sample 02/92-2D'; 3 spec., the same data as holotype, but '27°49.5' S 31°25.7' E, 17.vi.1992-18.vii.1992, 1140m, Sample 07/92-4A'; 2 spec., the same data as holotype, but '27°49.5' S 31°25.7' E, 18.xi.1992-17.xii.1992, 1140m, Sample 12/92-4A'; 2 spec., the same data as holotype, but '27°49.4' S 31°25.8' E, 17.xii.1992-16.i.1993, 1110m, Sample 01/93-4C'; 1 spec., the same data as holotype, but '27°49.4' S 31°25.7' E, 14.ii.1994-15.iii.1994, 1140m, Sample 03/94-4B, R. Stals [lgt.]'; 2 spec., the same data as holotype, but '27°49.4' S 31°25.0' E, 18.viii.1993-18.ix.1993, 1140m, Sample 09/93-3B, R. Stals [lgt.]'; 1 spec., the same data as holotype, but '18.viii.1992-18.ix.1992, 1150m, Sample 09/92-3A' (all SANC); 7 ♂♀, 'South Africa, KwaZulu-Natal, Ngomi Forest, 27°51' S, 31°23' E, 24.-27.xi.2006, J. Janák lgt.' (JJRC, JSPC, RBSC); 120 ♂♀, 'S. Afr. [South Africa, KwaZulu-Natal], Zulu Drakensbg, Ngome tourist camp, 25.2.1997, 27.49 S – 31.25 E, E-Y: 3286, sifted indig. forest, leg. Endrödy-Younga' (TMSA); 27 ♂♀, ditto, but '20.2.1997, 27.50 S – 31.24 E, E-Y: 3289' (TMSA).

**Description** (Figs 9A–G). Body length 1.72–1.97 mm, holotype 1.88 mm. Body dark brownish to blackish, antennae and tarsi paler, reddish brown to dark brownish, apical part of scape sometimes darker. Elytra with moderately sparse appressed scales, subtriangular, owned apicad, with projecting bristle, 3–4 across width of one interval, distance between them about half

diameter of one scale. Pronotum and head with rostrum with dense subcircular scales, with fine fan-shaped striae, creating short, fine and dense fringes on almost half of circumference, almost covering integument; lateral parts of pronotum with scales half star-shaped, with long sparse fringes. Appressed scales on scape, femora and tibiae similar to pronotal ones, slightly smaller. Erect setae on elytra very varying, with shape from lancet-shaped to subspatulate or even spatulate, with length equal to width of one interval or longer, but having all other characters uniform, this seems to be highly variable within species; setae weakly shorter on anterior third than on posterior declivity, creating one regular row on each interval, in some species intervals 2 and 4 with very sparse setae. Pronotum and head with rostrum with semi-erect subspatulate setae similar to those on anterior part of elytra but shorter, irregularly scattered, setae on interocular space twice as long as the others. Scape, femora and tibiae with short, long-oval, semiappressed setae, densely irregularly scattered, hardly visible, not prominent from outline. Body vestiture light brownish, raised setae paler, greyish brown.

*Head* (Figs 9A–D). Rostrum in males (Fig. 9B) distinctly tapered in basal half and enlarged in apical half, with concave sides and subparallel-sided in females (Fig. 9C), slightly tapered in basal half and indistinctly enlarged in apical half, rounded around scrobes, in males 1.09–1.12× as wide as long, at apex as wide as at base; in females 1.16–1.25× as wide as long, at base 1.04–1.09× as wide as at apex, in both sexes distinctly narrower than head including eyes. Epifrons with slender longitudinal median stria, when cleared of scales shiny, shallowly deepened with several fine punctures, with short slender longitudinal median stria on basal half and with two very slender subparallel keels along whole length. Frons deepened, finely rough. Epistome in males wide, wider than epifrons at midlength, in females narrow, equally wide as epifrons at midlength. Head when cleared of scales shiny, distinctly convex, with small fovea and slender median longitudinal stria on apical half, with only several very slender and short striae and punctures mainly on anterior part and along eyes. Eyes weakly prominent from outline of head.

*Antennae* (Fig. 9A). Antennal scape 5.8–5.9× as long as wide and 1.5–1.6× as long as funicle, club 1.1–1.2× as wide as scape at apex. Funicle segment I 1.7–1.8× as long as wide and 1.7–1.8× as long as segment II, which is 1.3–1.4× as long as wide; segments III–V 1.5× as wide as long; segment VI 1.3–1.4× as wide as long; segment VII 1.2× as wide as long. Club 1.8–1.9× as long as wide.

*Pronotum* (Fig. 9A) in males 1.38–1.43×, in females 1.41–1.52× as wide as long, widest at about midlength, with distinctly rounded sides. When cleared of scales regularly convex, moderately shiny, irregularly sparsely and coarsely punctured, punctures shallow, with small ring inside, distance between two punctures shorter than diameter of one puncture, pronotum with anterior border reddish, bordered by transverse dense row of fine punctures. Pronotum in lateral view almost flat, lowered behind anterior border.

*Elytra* (Fig. 9A) in males 1.22–1.27×, in females 1.26–1.29× as long as wide.

*Legs* (Figs 9A, E). Tarsomere II 1.6–1.7× as wide as long; tarsomere III 1.3–1.4× as wide as long and 1.2–1.3× as wide as tarsomere II; onychium 1.5× as long as tarsomere III.

*Male genitalia* (Figs 3E, 9G). Penis longer than wide, slender, subparallel-sided, with regularly subtriangular apex.

**Etymology.** Patronymic, species is named after the Ngome forest, where an extensive material of the new species was collected.

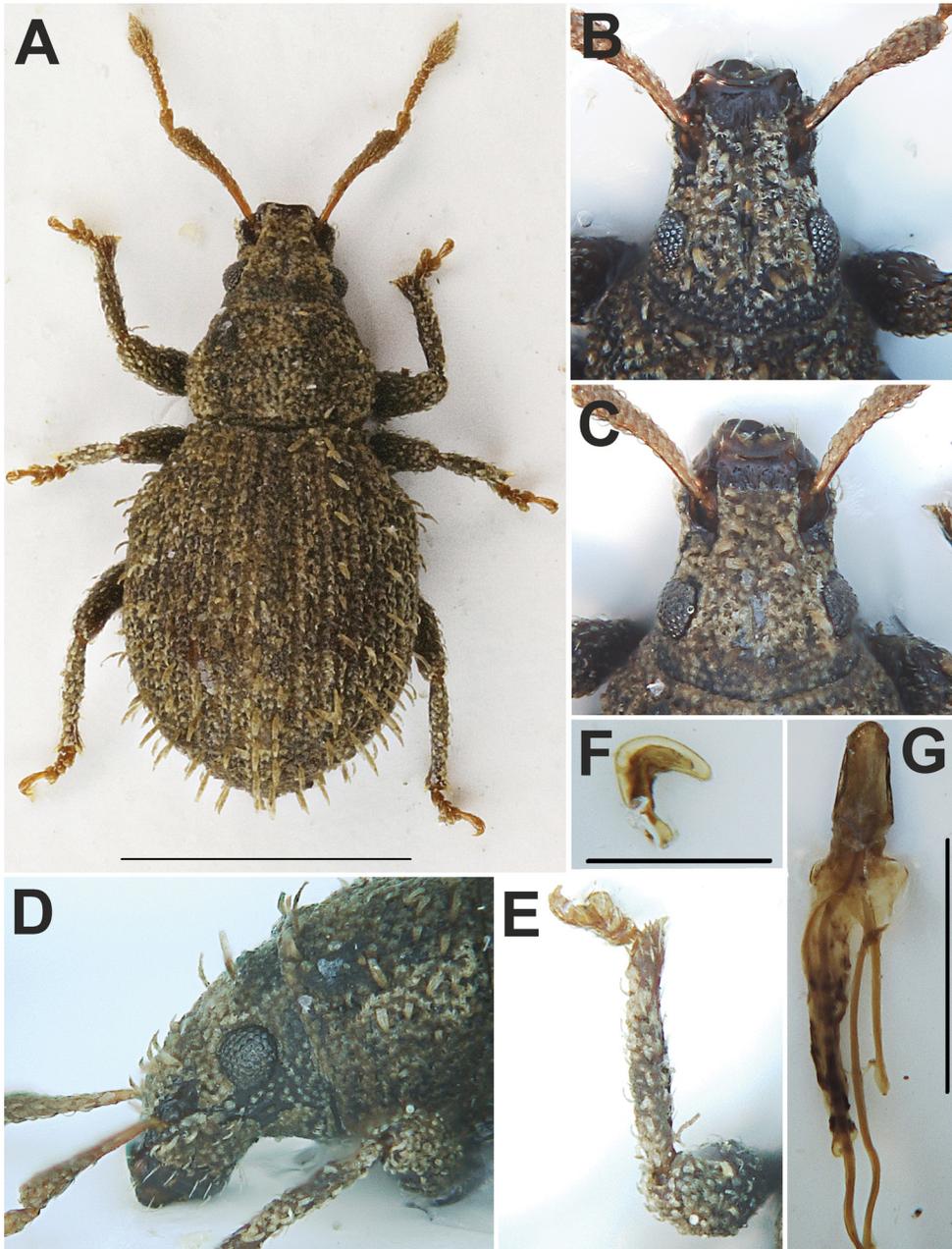


Fig. 9. *Epistomius ngomiensis* sp. nov. A – habitus, dorsal view, holotype, male; B – rostrum, male, dorsal view; C – rostrum, female, dorsal view; D – rostrum, male, lateral view; E – protibia, male; F – spermatheca; G – aedeagus. Scale bars: 1 mm (A), 0.5 mm (G) and 0.2 mm (F).

**Biology.** The majority of the material was collected in unbaited pitfall traps in dense afro-montane native forest, whereas a smaller part was sifted from forest litter.

**Distribution.** South Africa: KwaZulu-Natal (Fig. 4).

**Differential diagnosis.** The species is hardly distinguishable with varying shape and length of the raised elytral setae, but distinctly recognisable by appressed elytral scales awned, with projecting bristles, rostrum in males distinctly tapered in basal half and enlarged in apical half, with concave sides and subparallel-sided in females; and penis long and slender, without tip at apex. This set of characters easily distinguishes *E. ngomiensis* sp. nov. from all other species of the genus.

### *Epistomius niger* sp. nov.

(Figs 2G–I, 3F, 10A–G)

**Type locality.** South Africa, KwaZulu-Natal, Ongoye Forest Reserve, 28°50.6'S, 31°40.1–2'E.

**Type material.** HOLOTYPE: 1 ♂, 'South Africa, KwaZulu-Natal, Ongoye Forest Reserve, 28°50.6' S 31°40.1–2' E, 11.i.2016, Berlese extraction, leaf & log litter, sifting, J. Janák lgt.' (TMSA). PARATYPES: 24 ♂♀, the same data as holotype (JJRC, JSPC, NMPC, RBSC); 4 ♂♀, 'RSA [South Africa], KwaZulu-Natal, Ongoye Forest, Birders Lodge, 280 m, 2.–6.XII.2010, leg. D. Bartsch & J. Berg' (SMNS); 69 ♂♀, 'S. Afr. [South Africa], KWZ Natal [KwaZulu-Natal], Ongoye Forest, 294 m, 4.–5.12.2010, 28.50 S – 31.44 E, E-Y: 3890, sifting forest litter, leg. Ruth Müller' (TMSA).

**Additional material examined.** 14 ♂♀, 'South Africa, KwaZulu-Natal, Entumeni Nature Reserve, 28°53.2' S 31°22.6' E, 11.i.2016, J. Janák lgt.' (JJRC, RBSC).

**Description** (Figs 2G–I, 10A–G). Body length 1.71–2.31 mm, holotype 1.75 mm. Body blackish, basal two thirds on antennal scape, funicle and short apical part of tibiae reddish brown, tarsi yellowish brown. Elytra, pronotum and head with rostrum sparsely covered with appressed oval to drop-shaped scales, 3–4 across width of one interval, leaving between scales distance only slightly shorter than width of one scale. Appressed scales on femora and tibiae identical to elytral ones but smaller. Setae on basal half of elytra semiappressed, short, inconspicuous, on apical half erect, conspicuous, slender, widest at midlength, narrowly apically rounded, only slightly shorter than width of one interval, distance between two setae on posterior declivity more than twice as long as length of one seta. Setae on pronotum and head with rostrum subspatulate, short, about equal to those of basal half of elytra, semiappressed, hardly prominent in lateral view. Scape, femora and tibiae with short, long-oval semiappressed setae, hardly prominent from outline. Scales and setae light greyish brown.

**Head** (Figs 10A–D). Rostrum in males (Fig. 10B) extremely enlarged in apical half, apical part distinctly prominent laterally, 1.15–1.19× as wide as long, at apex 1.17–1.19× as wide as at base and 0.9× as wide as head including eyes; in females (Fig. 10C) evenly weakly enlarged apicad with weakly concave sides, 1.06–1.08× as wide as long, at apex 1.04–1.08× as wide as at base, 0.8× as wide as head including eyes. Epifrons with weakly concave sides, when cleared of scales shiny, smooth, unpunctured, with deep and well developed longitudinal median stria reaching to middle of vertex and with two inconspicuous lateral longitudinal keels. Frons deepened, smooth. Epistome in males distinctly wider than width of epifrons at midlength, in females narrower, only slightly wider than epifrons at midlength. Head when cleared of scales shiny and smooth, with several very fine, almost indistinct longitudinal striae. Eyes convex, somewhat prominent from outline of head.

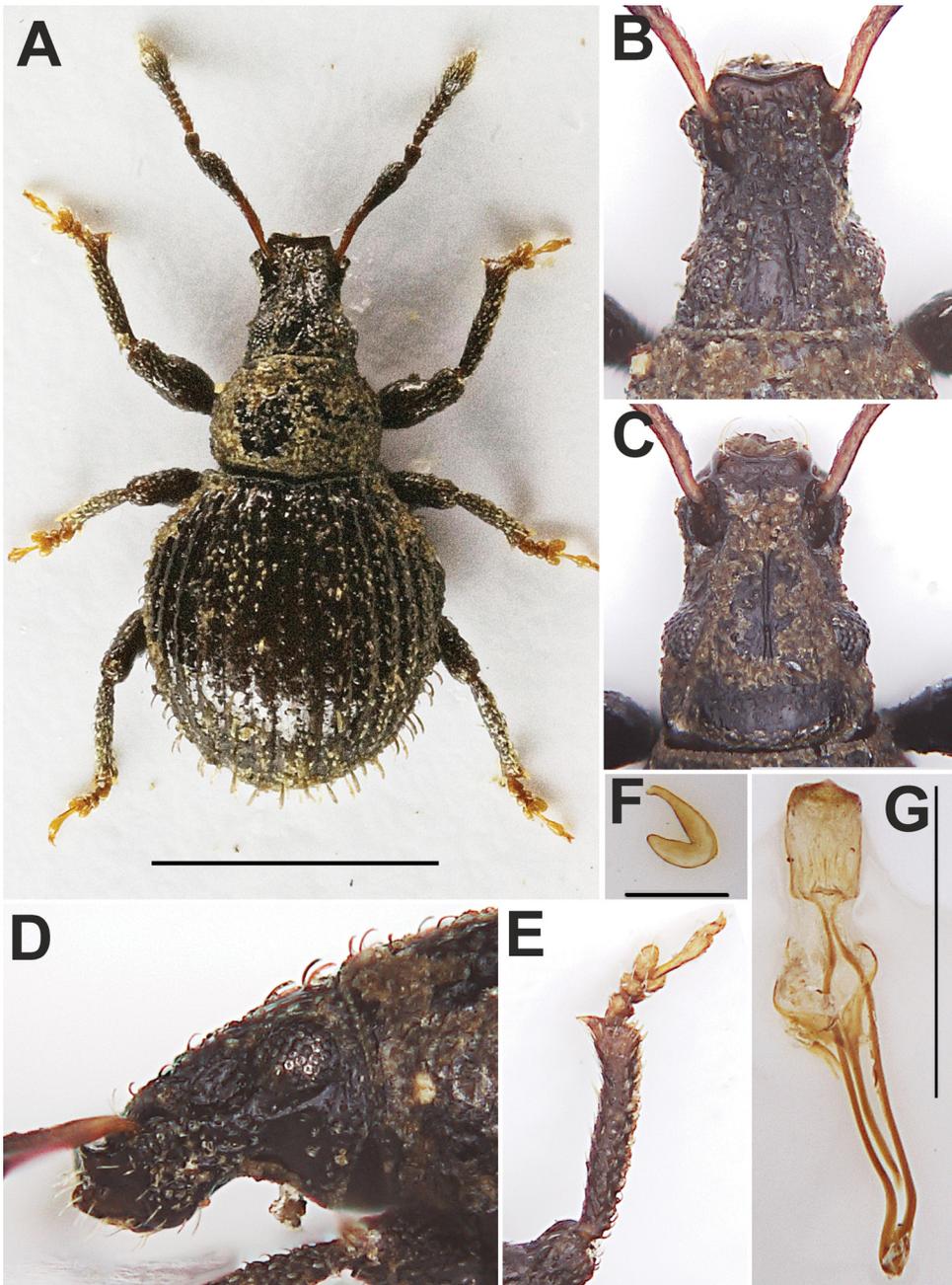


Fig. 10. *Epistomius niger* sp. nov. A – habitus, dorsal view, holotype, male; B – rostrum, male, dorsal view; C – rostrum, female, dorsal view; D – rostrum, male, lateral view; E – protibia, male; F – spermatheca; G – aedeagus. Scale bars: 1 mm (A), 0.5 mm (G) and 0.2 mm (F).

*Antennae* (Fig. 10A). Antennal scape 5.8–6.1× as long as wide and 1.5–1.6× as long as funicle, at apex 0.8× as wide as club. Funicle segment I 1.6–1.7× as long as wide and twice as long as segment II, which is 1.1–1.2× as long as wide; segments III–VI 1.3× as wide as long; segment VII 1.4–1.5× as wide as long. Club 1.6–1.7× as long as wide.

*Pronotum* (Fig. 10A) in males 1.43–1.49× as wide as long, in females 1.35–1.39× as wide as long, widest behind midlength, with rounded sides, more tapered anteriorly than posteriorly, constricted behind anterior margin. When cleared of scales regularly convex, shiny, densely coarsely punctured, with 6–7 punctures along the length, punctures large, distance of punctures shorter than their semidiameter. Pronotum in lateral view weakly convex, behind anterior border lowered.

*Elytra* (Fig. 10A) in males short, globular, 1.09–1.11× as long as wide, in females longer, oval, 1.16–1.19× as long as wide.

*Legs* (Figs 10A, E). Tarsomere II 1.6–1.7× as wide as long; tarsomere III 1.5× as wide as long and 1.3× as tarsomere II; onychium 1.9–2.1× as long as tarsomere III.

*Male genitalia* (Figs 3F, 10G). Penis short, weakly longer than wide, widest at base, slightly evenly tapered apically, apex subtriangular; in lateral view weakly irregularly curved, equally wide, tapered only at apex, with slender lengthened tip.

*Variability* (Figs 2G–I). Typical population from Ongoye has elytral setae on apical declivity slender, widest at midlength, apically shortly rounded, slightly shorter than width of one interval, while population from Entumeni has the same setae lancet-shaped, narrower, sharply apically pointed, weakly longer than width of one interval. The material from Entumeni was not included in the type series to conserve the typical characters (see the variability chapter in *Epistomius* description).

**Etymology.** The blackish colour of antennae, legs and integument suggested the Latin name of this new species.

**Biology.** The type specimens were sifted from leaf litter in native broad-leaved forest.

**Distribution.** South Africa: KwaZulu-Natal (Fig. 4).

**Differential diagnosis.** *Epistomius niger* sp. nov. is by conspicuously enlarged rostrum and globular elytra in males similar to *E. bulirschi* sp. nov., from which it can be easily distinguished by erect setae on posterior declivity, in males also by penis not enlarged in apical third and in females by rostrum weakly enlarged apically with epistome wider than epifrons at midlength. In view of the variability of elytral erect setae it could be confused mainly with *E. colonnellii* sp. nov. as it has similar shape of setae and rostrum in males distinctly enlarged apically, but it is distinguishable mainly by slenderer tibiae and tarsi with longer onychium, blackish antennal funicle and penis 1.6–1.7× as long as wide, tapered apically with small tip, while *E. colonnellii* sp. nov. has penis shorter and wider, 1.3–1.4× as long as wide, parallel-sided, apically obtuse.

### *Epistomius wanati* sp. nov.

(Figs 3G, 11A–G)

**Type locality.** South Africa, Mpumalanga, Berlin Forest near Kaapsehoop, Barretts trail, 25°57'22"S, 30°74'34"E, 1360 m a.s.l.

**Type material.** HOLOTYPE: ♂, 'RSA (N) [South Africa, North] Mpumalanga, 25.5722S/30.7434E, Berlin Forest nr. Kaapsehoop, sifting, 1360 m, Barretts trail, rainforest, 4.11.2013, leg. M. Wanat' (TMSA). PARATYPES: 8 ♂♀, the same data as holotype (MNHW, RBSC).

**Description** (Figs 11A–G). Body length 1.94–2.13 mm, holotype 2.06 mm. Body dark brownish to blackish, antennae reddish brown but club blackish, sometimes apical part of scape slightly darker, short apical part of tibiae and tarsi yellowish red to reddish brown. Elytra sparsely covered with appressed scales of irregular shape, 3 across width of one interval, subrounded to star- to fan-shaped, with short fringes, leaving short distances between scales. Pronotum and head with rostrum with fan-shaped scales with fringes, scales on pronotum sparse, on head with rostrum dense, almost covering integument. Appressed scales on scape, femora and tibiae identical to elytral ones but smaller. Setae on elytra semierect, at apex bent posteriad, subspatulate, tip apically rounded, on basal half somewhat longer than half width of one interval, on posterior declivity slightly shorter than width of one interval, about twice longer than setae on disc, distance between two setae on posterior declivity somewhat longer than length of one seta. Setae on pronotum and head with rostrum about equally long as setae on anterior part of elytra, semierect, subspatulate, setae on interocular space slightly longer than the others. Scape, femora and tibiae with short, long-oval semiappressed setae, hardly prominent from outline. Body vestiture light greyish brown, elytra with dark brownish spot on inner 1–2 intervals and moderately large spot on each half of elytra at midlength; pronotum with two longitudinal wide dark brownish stripes on disc.

*Head* (Figs 11A–D). Rostrum in both sexes identical (Figs 11B–C), in basal half slightly tapered apicad with straight sides, in apical half indistinctly enlarged around scrobes, not prominent laterally, 1.09–1.14× as wide as long, at base 1.02–1.04× as wide as at apex, at apex distinctly narrower than head including eyes. Epifrons with faintly visible longitudinal median stria along whole length, when cleared of scales shiny, smooth, unpunctured, shallowly longitudinally depressed, with wide and shallow, ill-defined median longitudinal stria. Frons deepened, longitudinally striate. Epistome in both sexes narrow, about equally wide as epifrons at midlength. Head when cleared of scales shiny and smooth, unpunctured, with slender longitudinal fovea. Eyes weakly prominent from outline of head.

*Antennae* (Fig. 11A). Antennal scape 5.6–5.9× as long as wide and 1.4× as long as funicle, at apex 0.8–0.9× as wide as club. Funicle segment I 1.6–1.7× as long as wide and 1.6–1.7× as long as segment II, which is 1.3–1.4× as long as wide; segments III–V 1.1× as wide as long; segments VI and VII 1.2–1.3× as wide as long. Club 1.6–1.7× as long as wide.

*Pronotum* (Fig. 11A) 1.52–1.61× as wide as long, widest in posterior third, with distinctly rounded sides, behind anterior margin weakly constricted. When cleared of scales regularly convex, shiny, sparsely irregularly coarsely punctured, punctures very large, 5–6 along the whole length, on posterior half larger than on anterior half, distance between two punctures shorter than diameter of one puncture. Pronotum in lateral view weakly convex, behind anterior border lowered.

*Elytra* (Fig. 11A) 1.19–1.25× as long as wide with identical shape in both sexes.

*Legs* (Figs 11A, E). Tarsomere II 1.5–1.6× as wide as long; tarsomere III 1.4–1.5× as wide as long and 1.4–1.5× as wide as tarsomere II; onychium 1.6–1.7× as long as tarsomere III.

*Male genitalia* (Figs 3G, 11G). Penis short and wide, about isodiametric, somewhat squarred, with slightly convex sides, with apex obtuse with small but distinct tip; laterally curved, slender, with short separated tip.

**Etymology.** The new species is dedicated to our friend Marek Wanat (MNHV), an eminent specialist in Apionidae and collector of several species of *Epistomius* gen. nov.

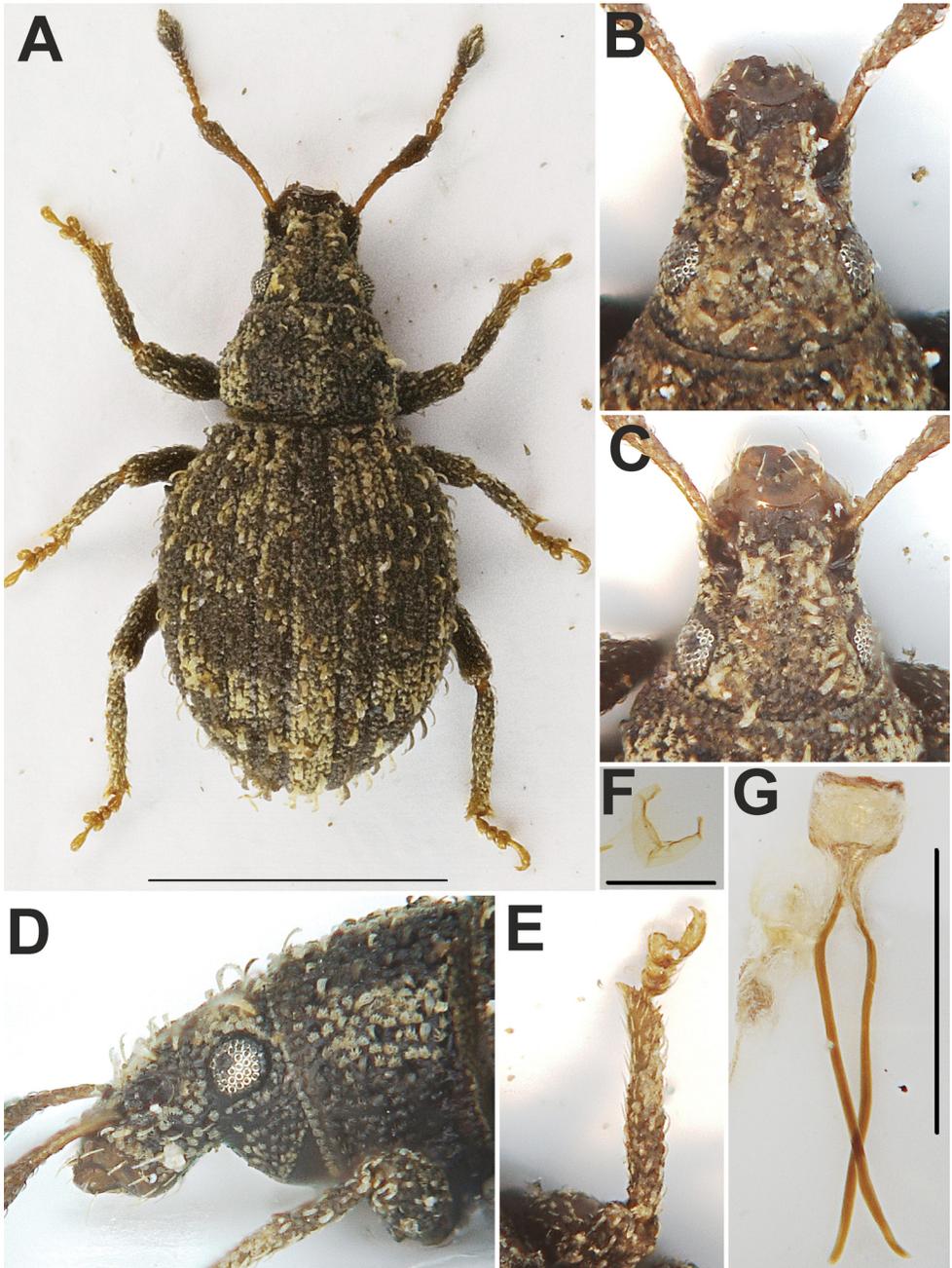


Fig. 11. *Epistomius wanati* sp. nov. A – habitus, dorsal view, holotype, male; B – rostrum, male, dorsal view; C – rostrum, female, dorsal view; D – rostrum, male, lateral view; E – protibia, male; F – spermatheca; G – aedeagus. Scale bars: 1 mm (A), 0.5 mm (G) and 0.2 mm (F).

**Biology.** The type material was sifted from rainforest litter.

**Distribution.** South Africa: Mpumalanga (Fig. 4).

**Differential diagnosis.** The species is characterized by elytral setae on apical declivity semierect to erect, rostrum in both sexes subparallel-sided with epistome in both sexes equal, as wide as epifrons at midlength similar to *E. natalensis* sp. nov., from which it can be distinguished by the following characters: elytral setae on basal half longer, semierect, on apical half shorter than width of one interval, subspatulate, laterally at apex bent, twice as long as setae on basal half; funicle segments III–V  $1.1\times$  as wide as long; club short and wide,  $1.6\text{--}1.7\times$  as long as wide; and penis wide, about as long as wide, subsquared, widest at midlength, laterally slender.

### Key to the species of *Epistomius*

- 1 Elytral setae on apical declivity semiappressed (Fig. 5A). Rostrum in males distinctly enlarged anteriorly, at apex as wide as head including eyes (Fig. 5B). Penis short, at apex regularly triangular, in basal half concave (Fig. 3A). Body length 1.6–2.1 mm. .... *E. bulirschii* sp. nov.
- Elytral setae on apical declivity semierect to erect (Figs 6A, 7A, 8A, 9A, 10A, 11A). Rostrum in males moderately enlarged anteriorly or subparallel-sided, at apex narrower than head including eyes (Figs 6B, 7B, 8B, 9B, 10B, 11B). Penis short or long, at apex obtuse, rounded or with small tip, concave or subparallel-sided (Figs 3B–G). ..... 2
- 2 Appressed elytral scales awned, with projecting bristles (Fig. 9A). Penis long, without tip at apex (Fig. 3E). Body length 1.7–2.0 mm. .... *E. ngomiensis* sp. nov.
- Appressed elytral scales irregularly subcircular or irregularly star- to fan-shaped (Figs 6A, 7A, 8A, 10A, 11A). Penis short or long, when long, then with small tip (Figs 3B–D, F, G). ..... 3
- 3 Rostrum in males enlarged apically, in females subparallel-sided (Figs 6B, 7B, 10B). Epistome wider than epifrons at midlength, and also wider in males than in females (Figs 6B–C, 7B–C, 10B–C). ..... 4
- Rostrum in both sexes subparallel-sided (Figs 8B–C, 11B–C). Epistome as wide as epifrons at midlength and equal in both sexes (Figs 8B–C, 11B–C). ..... 6
- 4 Protibiae long and slender,  $6.4\text{--}6.9\times$  as long as wide at midlength (Fig. 10E). Onychium long, at least  $1.9\times$  as long as tarsomere III. Antennal funicle blackish (Fig. 10A). Penis tapered apically (Fig. 10G). Body length 1.7–2.3 mm. .... *E. niger* sp. nov.
- Protibiae shorter and more robust,  $5.1\text{--}5.3\times$  as long as wide at midlength (Figs 6E, 7E). Onychium short, at most  $1.5\times$  as long as tarsomere III. Antennal funicle brownish (Figs 6A, 7A). Penis parallel-sided (Figs 6G, 7G). ..... 5
- 5 Elytral setae on posterior declivity long and slender, pointed, twice as long as conspicuous setae on basal half (Fig. 6A). Tarsomere II  $1.3\text{--}1.4\times$  as wide as long. Elytra in males longer (Fig. 6A),  $1.15\text{--}1.18\times$  as long as wide. Penis short, about as long as wide, at apex obtuse, tip not separated (Fig. 3B). Body length 1.9–2.6 mm. .... *E. colonnellii* sp. nov.

- Elytral setae on posterior declivity subspatulate, rounded apicad, 4–5× as long as inconspicuous setae on basal half (Fig. 7A). Tarsomere II 1.5–1.6× as wide as long. Elytra in males shorter (Fig. 7A), 1.12–1.14× as long as wide. Penis distinctly longer than wide, with separated tip at apex and concave before it (Fig. 3C). Body length 1.6–2.1 mm. ...  
..... *E. janaki* sp. nov.
- 6 Elytral setae on basal half short, semiappressed, on posterior declivity longer than width of one interval, lancet-shaped, laterally almost straight, 3–4× as long as setae on basal half (Fig. 8A). Funicle segments III–V 1.4× as wide as long (Fig. 8A). Club long and slender, 2.0–2.1× as long as wide (Fig. 8A). Penis slender, longer than wide, widest in apical third, rounded, laterally wide (Fig. 3D). Body length 2.1–2.4 mm. ....  
..... *E. natalensis* sp. nov.
- Elytral setae on basal half longer, semierect, on posterior declivity shorter than width of one interval, subspatulate, laterally at apex bent, twice as long as setae on basal half (Fig. 11A). Funicle segments III–V 1.1× as wide as long (Fig. 11A). Club short and wide, 1.6–1.7× as long as wide (Fig. 11A). Penis wide, about as long as wide, subquadrate, widest at midlength, laterally slender (Fig. 3G). Body length 1.9–2.1 mm.  
..... *E. wanati* sp. nov.

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